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GLOSSARY OF AVIATION TERMS

TERMES D'AVIATION

ENGLISH-FRENCH
ILLUSTRATED

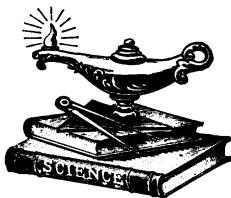
FRANCAIS-ANGLAIS
ILLUSTRÉ

COMPILED BY

LIEUT. VICTOR W. PAGÉ, A.S.S.C., U.S.R.
AND
LIEUT. PAUL MONTARIOL, FRENCH FLYING CORPS

Assigned to
INSTRUCTION DEPARTMENT
SIGNAL CORPS AVIATION SCHOOL
MINEOLA, LONG ISLAND

LISTS OF AVIATION TERMS IN GENERAL USE GIVEN
IN FRENCH WITH ENGLISH EQUIVALENTS AND IN
ENGLISH WITH CORRESPONDING FRENCH WORDS



*A VALUABLE REFERENCE FOR ALL ENGAGED IN THE
ALLIED AVIATION SERVICE*

1917

CHARLES S. PRATT
New and Old Books, Stationery, Blank Books
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SIGNAL CORPS AVIATION SCHOOL

HAZELHURST FIELD

MINEOLA, L. I.

PREFACE

As there are numerous young men training in this country, both in ground schools and at flying fields for the aviation service, and as much of this will probably be performed in France, it seems desirable to compile a brief glossary of commonly used aviation terms in both French and English to facilitate intercourse between the pilots and mechanics speaking different languages who work together in the present emergency.

These lists are enlarged from a briefer series prepared originally for use in teaching classes at the Signal Corps Aviation School, Mineola, L. I. The illustrations accompanying the text should make everything clear about which any doubt could exist. As no definitions are given, the booklet is more in the nature of a glossary or list of words than a dictionary, and is intended only for use of those already familiar with aviation. Some of the equivalents may not be literally correct, but are selected with a view to listing only terms in common, everyday usage.

The painstaking work of Lieut. Paul Montariol, of the French Flying Corps, assigned as instruction officer at Mineola, L. I., has been of great value in furnishing French equivalents and insures that these will conform to the accepted practice abroad. It is believed that this

compilation will be of some value in securing closer co-öperation and more intelligent discussion of aviation subjects between members of our oversea aviation forces and our non-English speaking allies.

VICTOR W. PAGÉ,

1st Lieut. A. S. S. C., U. S. R.

October, 1917.

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GLOSSARY OF
AVIATION TERMS
ENGLISH—FRENCH

GLOSSARY OF AVIATION TERMS

ENGLISH—FRENCH

FLYING FIELD TERMS

AIRMAN
ADJUSTMENT

AIRPLANE
AIRSHIP
ALTIMETER
ALTITUDE
ANGLE OF INCIDENCE
ANGLE OF ATTACK
APPARATUS
AVIATOR

BALANCE
BALLOON
BAROGRAPH
BASKET
BREAKDOWN
BUS (Comm. for Plane)

TERMES EMPLOYÉS SUR L'AERODROME

AVIATEUR
RÉGLAGE D'UN AP-
PAREIL
AEROPLANE, AVION
AERONAT
ALTIMÈTRE
ALTITUDE
ANGLE D'INCIDENCE
ANGLE D'ATTAQUE
APPAREIL, ENGIN
AVIATEUR

ÉQUILIBRE
BALLON
BAROGRAPHE
NACELLE
PANNE
COUCOU, ZINC, TAXI
(Vulg.)

FLYING FIELD
TERMS

CAMBER
CANVAS HANGAR

CARROUSEL (Involuntary sharp turns on ground)
CENTER OF GRAVITY
CENTER OF PRESSURE
CENTER OF THRUST
CHOCK
COMPASS
CRABBING

DEAD LEAF (Falling like a)
DIHEDRAL
DIVE (TO)
DRAG

DRIFT

DUAL CONTROL

ENGINE

FACTOR OF SAFETY

FLARE (Guide for landing)

TERMES EMPLOYÉS SUR
L'AERODROME

COURBURE
HANGAR DE TOILE,
(Vulg. BESSONNEAU)
CHEVAL DE BOIS
(Tournants involontaires au sol)
CENTRE DE GRAVITÉ
CENTRE DE PRESSION
CENTRE DE POUSSEE
CALE
BOUSOLE
MARCHER EN CRABE

FEUILLE-MORTE (Descente en)
DIÈDRE
PIQUER
RÉSISTANCE À
L'AVANCEMENT
DÉRIVER, DÉPORTER,
DÉRIVE
DOUBLE COMMANDE

MOTEUR

COÉFFICIENT DE
SÉCURITÉ
FEU D'ATTERRISSAGE

<u>FLYING FIELD</u> <u>TERMS</u>	<u>TERMES EMPLOYÉS SUR</u> <u>L'AERODROME</u>
FUR LINED BOOTS	CHAUSSENS FOURRÉS
FUR LINED GLOVES	GANTS FOURRÉS
GAP	ESPACE ENTRE LES PLANS
GLIDE	PLANER
GOGGLES	LUNETTES
GRASS CUTTING (Fly- ing close to the ground)	RASE MOTTES (Vol au ras du sol)
HANGAR	HANGAR
HEIGHT INDICATOR	ALTIMÈTRE
HELMET	CASQUE
HYDROAIRPLANE	HYDROAEROPLANE
INCIDENCE	INCIDENCE
LAND (To)	ATTERRIR
LANDING	ATTERRISSAGE
LANDING GROUND	TERRAIN D'ATTERRIS- SAGE
LANDING ON NOSE & REMAINING TAIL HIGH	SE METTRE EN PY- LONE
LANDING SHEET (Cloth marker)	DRAP D'ATTERRIS- SAGE
LIFT*	FORCE ASCENSION- NELLE
LINE OF FLIGHT	LIGNE DE VOL

<u>FLYING FIELD</u> <u>TERMS</u>	<u>TERMES EMPLOYÉS SUR</u> <u>L'AERODROME</u>
LOGGY, SLUGGISH	MOU, TANGENT
LOOPING THE LOOP	LOOPING, BOUCLER LA BOUCLE
MAP	CARTE
MOTIVE POWER	FORCE MOTRICE
NOSING UP	MONTER
NOSING DOWN	DESCENDRE, PIQUER
NOSE HEAVY	LOURD DU NEZ
NOSE SPIN	VRILLE SUR LE NEZ
OBSERVER	OBSERVATEUR
ORIENTATION	ORIENTATION
PANCAKE (Landing)	PERTE DE VITESSE (Atterrissage)
PLANE	AVION
BATTLING PLANE	AVION DE CHASSE
RECONNOITERING PLANE	AVION DE RECONNAIS- SANCE
BOMBARDING PLANE	AVION DE BOMBARDEMENT
PILOT	PILOTE
PROPELLER PITCH	PAS DE L'HÉLICE
PROPELLER WASH	SOUFFLE DE L'HÉLICE
PUSHER	AVION MU PAR HÉ- LICE PROPULSIVE
REVOLUTIONS (R.P.M.)	TOURS (À LA MINUTE)

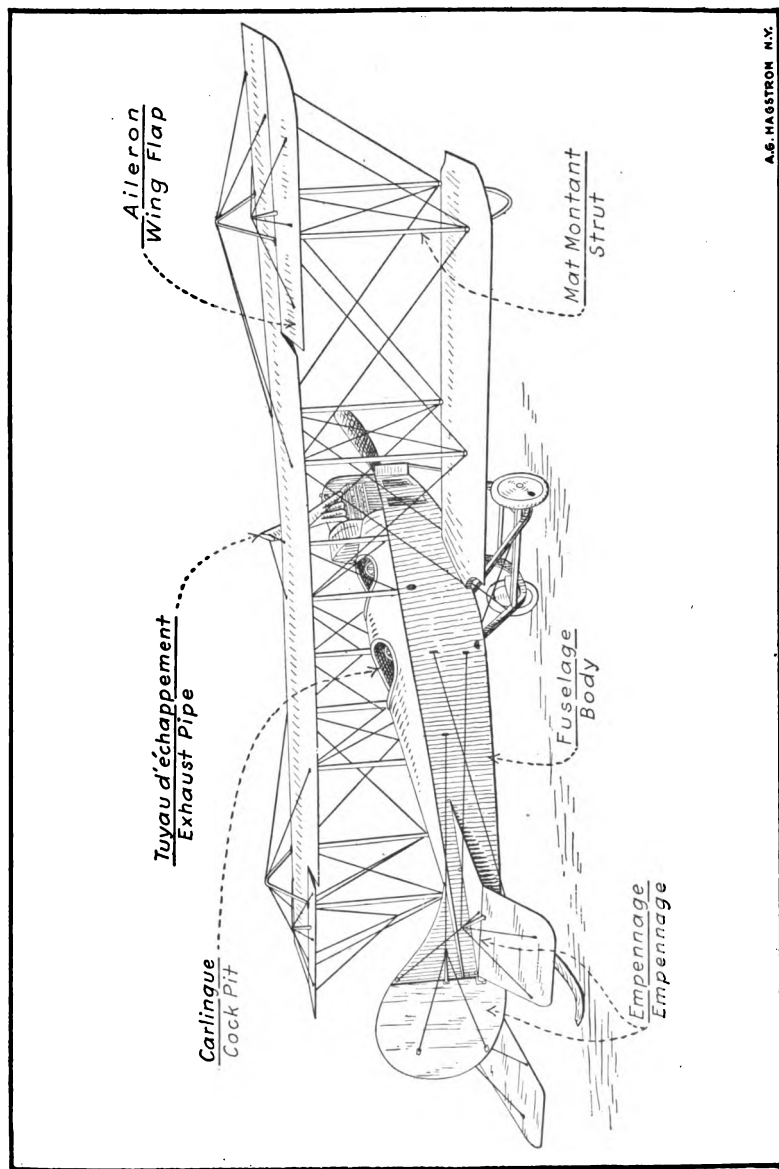


FIG. 1.—AIRPLANE VIEWED FROM REAR SHOWING IMPORTANT CONTROL ELEMENTS
 AVION VUE ARRIERE MONTRANT LES PRINCIPALES COMMANDES

FLYING FIELD
TERMS

ROCKING

SIDE SLIP
SLOW SPEED
SLUGGISH
SOMERSAULT (To)
SPEED INDICATOR

SQUADRON
STAGGERED WINGS
STALL

STUNTS

TAIL DIVE

TAIL SPIN
TO BANK
TO DIVE
TO DRIFT
TO FLY OVER
TO LEAVE THE
GROUND
TO START ENGINE
TO SWITCH OFF
TO SWITCH ON
TO TILT
TO TAXI

TERMES EMPLOYÉS SUR
L'AERODROME

REMOUS

GLISSADE SUR L'AILE
RALENTIR
TANGENT, MOU
CAPOTER
INDICATEUR DE
VITESSE
ESCADRILLE
PLANS DÉCALÉS
PERTE DE VITESSE
(en l'air)
ACROBATIES

GLISSADE SUR LA
QUEUE
VRILLE
INCLINER, PENCHER
PIQUER
DÉRIVER
SURVOLER
DÉCOLLER

METTRE EN MARCHÉ
COUPER LE CONTACT
METTRE LE CONTACT
INCLINER, PENCHER
ROULER AU MOTEUR

FLYING FIELD
TERMS

TRACTOR

TURNING

TURN OVER ON THE
WING

UNION SUIT

VEERING

WASH IN, WASH OUT

WIND CONE

WINDWAY

WING SPAN

WING WARPING

ZUHMING, ZOOMING

THE PLANE

AXLE

BAROGRAPH

BIPLANE

BLADE (PROPELLER)

BODY

TERMES EMPLOYÉS SUR
L'AERODROME

AVION MU PAR HÉ-
LICE TRACTIVE

TOURNANT, VIRAGE

RENVERSEMENT (SUR
L'AILE)

COMBINAISON

VIRAGE

RÉGLAGE DE L'INCI-
DENCE

MANCHE À VENT

DÉRIVE

ENVERGURE

GAUCHISSEMENT

MONTER EN CHAN-
DELLE

L'AVION

ESSIEU

BAROGRAPHE

BIPLAN

PALE

FUSELAGE

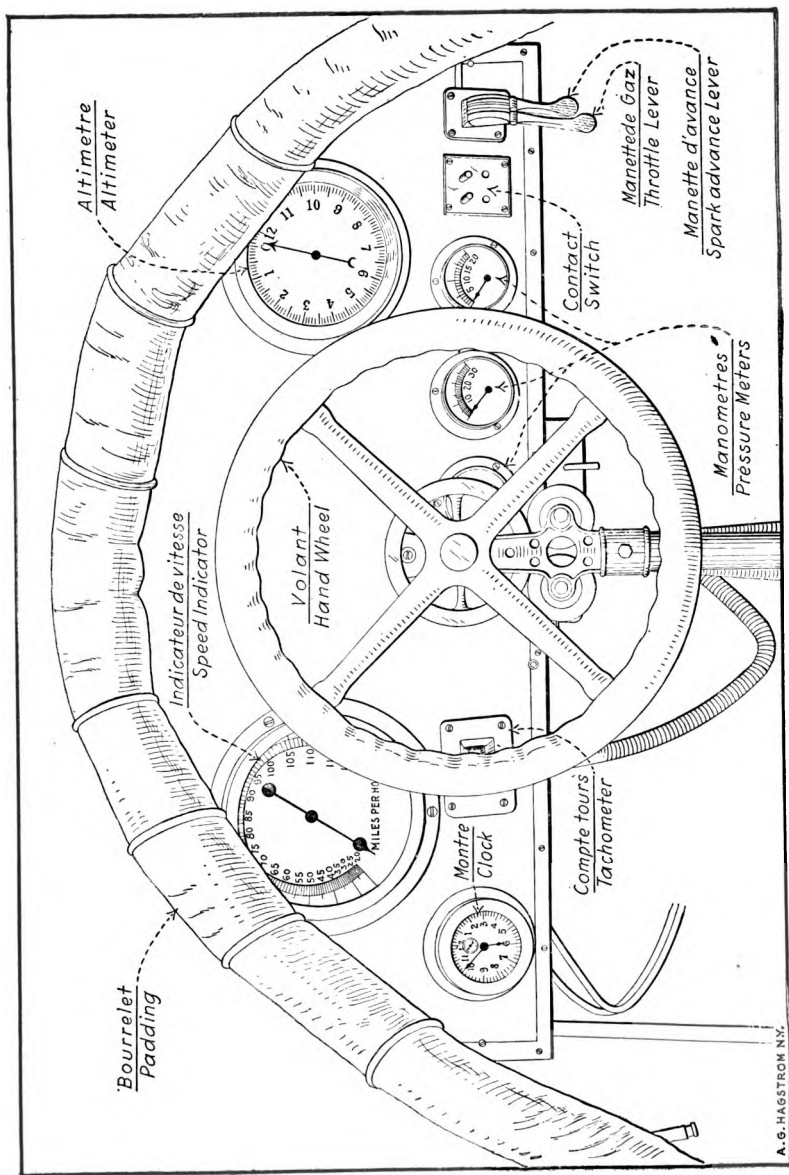


FIG. 2.—MEASURING, INDICATING AND CONTROL ELEMENTS OF AIRPLANE
COMMANDES ET INSTRUMENTS DE BORD D'UN AVION.

A. G. HAGSTROM N.Y.

THE PLANE

BOLT
BRACING STRUT
BRACING TUBE
BRACING WIRES
BRONZE BEARING OF
AXLE GUIDE

CABANE
CABLE
CELLULE
CENTRAL PANEL
CLOTH WINDING
COCKPIT
COMPASS
CONTROL BRIDGE
CONTROL ELEMENTS
CONTROL STICK
CORD WINDING
COVER
CUSHION

DIHEDRAL
DOPE

ELEVATOR

ENGINE BED
ENGINE SPIDER SUP-
PORT

L'AVION

BOULON
JAMBE DE FORCE
TIRANT
CROISILLONS
PATIN DE GLISSIÈRE

CABANE
CABLE
CELLULE
PLAN CENTRAL
MAROUFLAGE
CARLINGUE
BOUSOLE
COMMANDES À PONT
COMMANDES
MANCHE À BALAI
TRANSFIL
HOUSSE
COUSSIN

DIÈDRE
ENDUIT

STABILISATEUR
(Gouvernail de Pro-
fondeur)
BERCEAU DU MOTEUR
ARAIGNÉE SUPPORT
DE MOTEUR

THE PLANE

FAIR
FAIRING
FASTENING
FIN (TAIL)
FITTINGS
FLEXIBLE SHAFT

FLIPPERS

FLOORING
FOOT LEVER
FRAME
FUSIFORM FRAME

GLASS GAUGE
GRAVITY TANK

GUIDE

HANDLE
HINGE
HOLLOW WOOD
HOOD
HORN
HUB

JOY STICK

KNUCKLE

L'AVION

PROFIL
FUSELÉ, PROFILÉ
ATTACHES
DÉRIVE (PLAN)
FERRURES, GODETS
TRANSMISSION FLEX-
IBLE
VOLETS DE PROFON-
DEUR, STABILISA-
TEUR

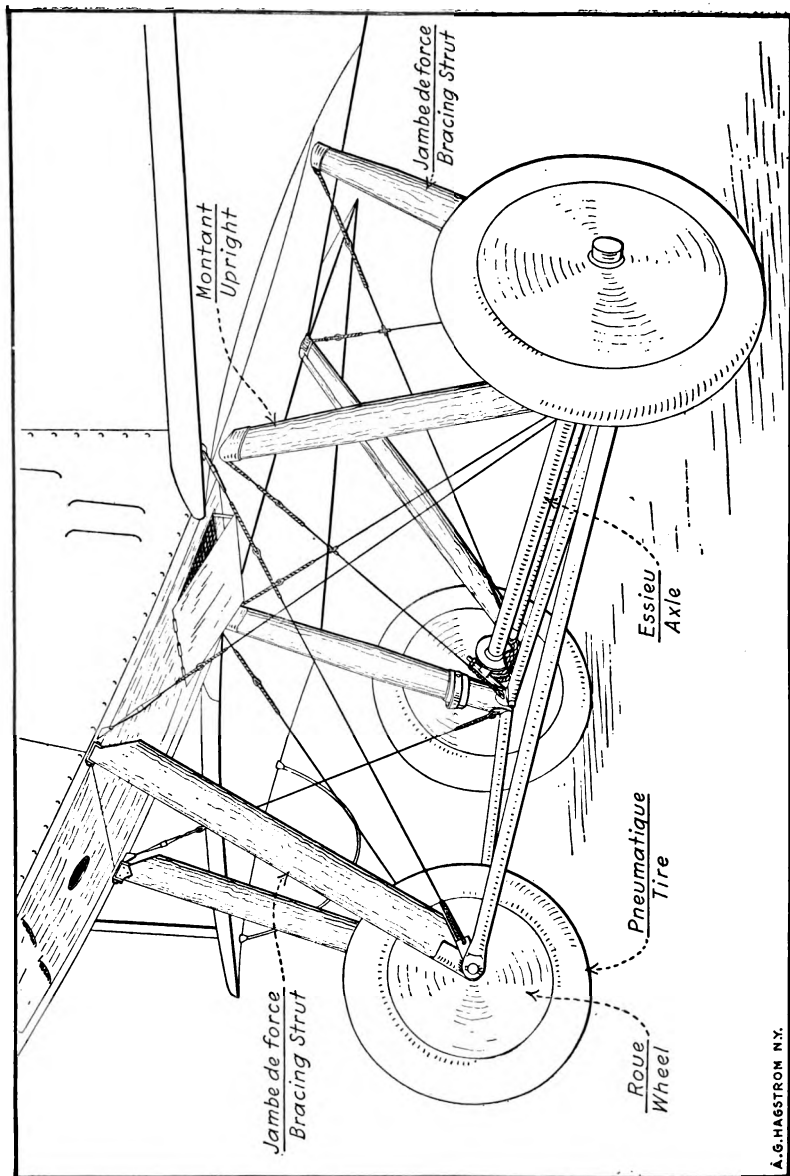
PLANCHER
PALONNIER
CHASSIS
FUSELAGE

TUBE DE NIVEAU
RESERVOIR EN
CHARGE
GLISSIÈRE

POIGNÉE
CHARNIÈRE
BOIS CREUX
CAPOT
GUIGNOL
MOYEU

MANCHE À BALAI

CHARNIÈRE



A.G. HAGSTROM N.Y.

FIG. 3.—AIRPLANE LANDING GEAR OF THREE-WHEEL TYPE SHOWING MAIN COMPONENTS
TRAIN D'ATERRISSAGE À TROIS ROUES

THE PLANE

L'AVION

LAMINATED WOOD

CONTREPLAQUÉ
(BOIS)

LANDING GEAR

TRAIN D'ATTERIS-
SAGE

LEADING EDGE

BORD D'ATTAQUE
ARÉTIER AVANT

LINEN

TOILE

LONGERON

LONGITUDINAL BAR }

LONGERON

LOUVRES

PERSIENNES

MAP HOLDER

PORTE-CARTES

MONOPLANE

MONOPLAN

NUT

ECROU

PADDING

BOURRELET

PANEL (CENTRAL)

PLAN CENTRAL

PEDAL

PÉDALE

PIANO WIRE

CORDE À PIANO

PRESSURE PUMP

POMPE À PRESSION

PRESSURE TANK

RÉSERVOIR SOUS

PRESSION

PROPELLER

HÉLICE

PROPELLER FLANGE

FLASQUE D'HÉLICE

PULLEY

POULIE

RIM

JANTE

ROPE

CORDE

RUDDER

GOUVERNAIL

THE PLANE

RUDDER BAR

RUNNER

SAFETY BELT

SAFETY WIRES

SCREW

SEAT

SHAFT (FLEXIBLE)

SHEETING

SHOCK ABSORBER

SIDE PANEL

SINGLE SEATER

SKID

SPOKES

STABILITY PLANES

STABILIZER

STABILIZING FIN

STEERING WHEEL

STIRRUP

STRUT

SUPPORTING CASTING

TACHOMETER

TAIL

TAIL FIN

TAIL SKID

TANK

L'AVION

PALONNIER

PATIN, PATINNAGE

CEINTURE DE SURETÉ

FREIN DE SURETÉ

HÉLICE

SIÈGE

TRANSMISSION FLEX-
IBLE (Vulg. BOW-
DEN)

BLINDAGE

EXTENSEUR

(Vulg. SANDOW)

PANNEAU

MONOPLACE

PATIN, PATINNAGE

RAYONS

EMPENNAGE

PLAN FIXE DE QUEUE

PLAN DE DÉRIVE

VOLANT

ÉTRIER

MAT, MONTANT

PIED

COMPTE TOURS

QUEUE

PLAN DE DÉRIVE

BÉQUILLE

RÉSERVOIR

THE PLANE

THIMBLE
THREE SEATERS
THROTTLE
TILTING WINGS
TIRE
TRACTOR SCREW
TRAILING EDGE

TRIPLANE
TUBE
TURN BUCKLE
TURRET
TWO-SEATER

VARNISH

WHEEL
WIND SHIELD
WING
WING COVERING
WING RIBS
WING SPAN
WING SPAR
WING SUPPORT
WIRE STAY

THE ENGINE

ADJUSTING NUT

L'AVION

COSSE
TRIPLACE
MANETTE
AILERONS
PNEU, PNEUMATIQUE
HÉLICE TRACTIVE
ARÉTIER ARRIÈRE,
BORD DE SORTIE
TRIPLAN
TUBE
TENDEUR
TOURELLE
BIPLACE

VERNIS

ROUE
PARE BRISE
AILE, PLAN
ENTOILAGE
NERVURES
ENVERGURE
BRAS D'AILE
ATTACHES D'AILES
TENDEUR

LE MOTEUR

MOLETTE

THE ENGINE

ADVANCE SPARKING

AIR FEEDER

AXLE

BABBITT METAL

BALL BEARING

BASE BEARING

BATTERY

BEARING BOX

BEVEL GEAR

BOLT

BRAKE

BREAKDOWN

BREATHING PIPE

CAM

CAM ROLLER

CAMSHAFT

CARBURETOR

CELL

CHAIN

CLUTCH

COG

COIL

COIL SPRING

LE MOTEUR

AVANCE A L'ALLUMAGE

MANCHE A AIR

AXE

ANTIFRICTION

ROULEMENT A BILLES

PALIER

PILE

COUSSINET

PIGNON CONIQUE, PIGNON D'ANGLE

BOULON

FREIN

PANNE

RENIFLARD

CAME

GALET

ARBRES A CAMES

CARBURATEUR

BATTERIE

CHAINE

EMBRAYAGE

PIGNON

BOBINE

RESSORT A BOUDIN

THE ENGINE

COIL VIBRATOR
 COMBUSTION CHAM-
 BER
 COMPENSATOR
 CONTACT BREAKER

 CONNECTING ROD
 CORE HOLE PLUG

 COUNTERSHAFT
 CRANK
 CRANK CASE
 CRANKSHAFT
 CRANK SHAFT JOUR-
 NAL
 CRANK THROW

 CYLINDER
 CYLINDER HEAD

 DISTRIBUTOR
 DRAIN PLUG

 DRY BATTERY

 ENGINE
 ENGINE BED
 ENGINE SUPPORT
 SPIDER
 EXHAUST

LE MOTEUR

TREMBLEUR
 CHAMBRE DE COM-
 PRESSION
 COMPENSATEUR
 DISPOSITIF DE RUP-
 TURE
 BIELLE
 BOUCHON DE DESSA-
 BLAGE
 ARBRE SECONDAIRE
 MANIVELLE
 CARTER
 VILBREQUIN
 SOIE DU VILBREQUIN

 COUDE DE VILBRE-
 QUIN
 CYLINDRE
 CULASSE

 DISTRIBUTEUR
 BOUCHON DE
 VIDANGE
 PILE SECHE

 MOTEUR
 BERCEAU DE MOTEUR
 ARAIGNÉE SUPPORT
 DE MOTEUR
 ÉCHAPPEMENT

THE ENGINE

EXHAUST MANIFOLD

EXHAUST PIPE

EXHAUST VALVE

FEEDING

FEED PUMP

FLOAT

FLOAT CHAMBER

FLYWHEEL

FUEL PIPE

FULCRUM

GEARS, GEARING

GEAR CASE

GOVERNOR

GREASE CUP

GRIND (To)

GROUND WIRE

HOSE

HORSE POWER

IGNITION

LE MOTEUR

COLLECTEUR

D'ÉCHAPPEMENT

TUYAU D'ÉCHAPPE-
MENTSOUPAPE D'ÉCHAPPE-
MENT

ALIMENTATION

POMPE D'ALIMENTA-
TION

FLOTTEUR

NIVEAU CONSTANT

VOLANT

ARRIVÉE D'ESSENCE

AXE, OU POINT D'AP-
PUY D'UN LEVIER

ENGRENNAGE

CARTER

REGULATEUR

GRAISSEUR

RODER

FIL DE MASSE

BOYAU (Caoutchouc)

CHEVAL VAPEUR
(H.P.)

ALLUMAGE

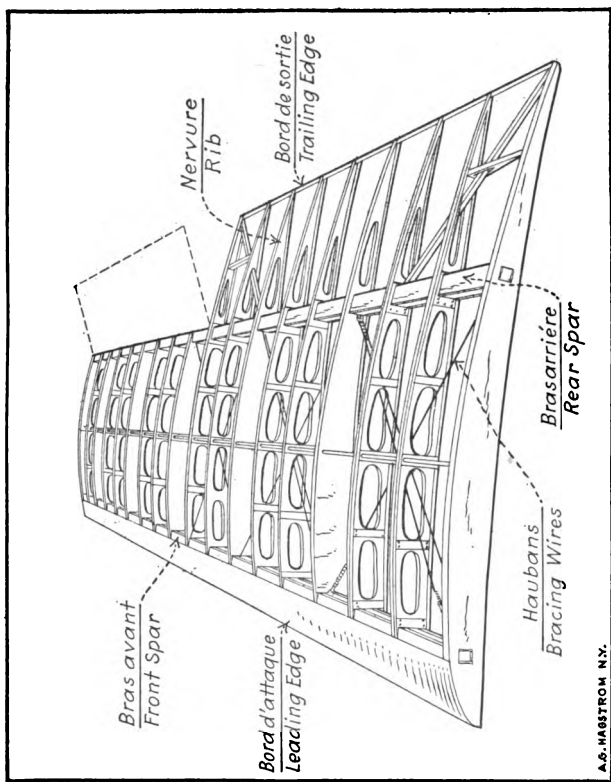


FIG. 4.—SKELETON STRUCTURE OF AIRPLANE WING
SQUELETTE D'UNE AILE D'AVION

THE ENGINE

LE MOTEUR

INDIA-RUBBER PIPE

(gasoline hose)

INJECTOR, SPRAY

NOZZLE

INLET

INLET PIPE

INLET VALVE

KNOCKING

LATE EXHAUST

VALVE TIME

LEAF SPRING

MAGNET

MAGNETO

MISHAP

MISSING

NEEDLE VALVE

NUT

OIL CUP

OIL GROOVES

PACKING

PETCOCK

DURIT

GICLEUR

ADMISSION

TUYAU D'ARRIVÉE

SOUPAPE D'ADMIS-
SION

COGNER

RETARD À L'ÉCHAP-
PEMENT

RESSORT À LAMES

AIMANT

MAGNETO

PANNE

RATÉ

POINTEAU

ÉCROU

GRAISSEUR

PATTES D'ARAI-
GNÉES, GOUTTIÈRES

JOINT

ROBINET DE DÉCOM-
PRESSION

THE ENGINE

PINION
PIPE
PISTON RING
PLATINUM TIPPED
SCREW
PRESSURE
PRESSURE METER
PRIMARY
PUMP

RADIATOR
REDUCTION GEARING
REGULATING SCREW
ROCKER
ROTARY

SAFETY GAP
SCREW
SEGMENT
SHAFT
SPARK PLUG
SPARK PLUG WIRE
SPEED OF ROTATION
SPLIT PIN
SPRING
STORAGE BATTERY
SUCTION

TANK

LE MOTEUR

PIGNON
TUYAU
SEGMENT
VIS PLATINÉE

PRESSION
MANOMÈTRE
PRIMAIRE
POMPE

RADIATEUR
DÉMULTIPLICATEUR
VIS DE RÉGLAGE
CULBUTEUR
ROTATIF

PARAFOUDRE
VIS
SEGMENT
ARBRE
BOUGIE
FIL DE BOUGIE
RÉGIME
GOUPILLE FENDUE
RESSORT
ACCUMULATEUR
ASPIRATION

RÉSERVOIR

THE ENGINE

TAPE
THROTTLE DISK

THRUST BEARING
(Ball)
TOGGLE

VALVE
VALVE GUIDE
VALVE SEAT
VALVE STEM
VENTURI TUBE

WATER JACKET
WIRE CONDUIT

TOOLS AND SHOP
TERMS

ACID
ADJUSTABLE
WRENCH
ALCOHOL
ALLOY
ALUMINUM
AMPERE
ANGLE IRON
ANVIL
ARMATURE

LE MOTEUR

CHATERTUN
VOLET DE CARBURA-
TEUR
BUTÉE À BILLES

CABILLOT

SOUPAPE
GUIDE DE SOUPAPE
SIÈGE DE SOUPAPE
TIGE DE SOUPAPE
DIFFUSEUR

CHEMISE D'EAU
CONDUIT DE FILS,
CLARINETTE

OUTILLAGE ET TERMES
D'ATELIER

ACIDE
CLEF ANGLAISE

ALCOOL
ALLIAGE
ALUMINIUM
AMPÈRE
CORNIÈRE
ENCLUME
ARMATURE

TOOLS AND SHOPTERMS

ASBESTOS
AUTOGENOUS WELD-
ING
AXLE END

BABBITT METAL
BAG
BATH
BEVEL
BIT
BLADE
BLOW TORCH

BOILER
BOLT
BORE
BRAZING
BREAK (TO)
BRONZE

CAN
CAPE CHISEL
CAST IRON
CAST STEEL
CASTOR OIL
CHAMOIS SKIN
CHISEL
COAL
COCK

OUTILLAGE ET TERMESD'ATELIER

AMIANTE
SOUDURE AUTOGENE

TOURILLON

ANTIFRICTION
SAC
BAIN
BISEAU
MÈCHE
LAME
LAMPE À SOUDER,
CHALUMEAU
CHAUDIÈRE
BOULON
ALÉSAGE
BRASURE
CASSER, BRISER
BRONZE

BIDON
BURIN
FONTE
ACIER FONDU
HUILE DE RICIN
PEAU DE CHAMOIS
CISEAU À FROID
CHARBON
ROBINET

TOOLS AND SHOP

TERMS

COMPASSES
COPPER
COPPER WIRE
COVER
CORK
CRACK
CROW BAR
CUTTING PLIERS

DEGREE

EBONITE
ELECTRIC WIRE
EMERY CLOTH
EMPTYING

FAT
FILE
FLANGE
FLAT PLIERS
FUNNEL

GALVANIZED
GASOLINE
GAUGE
GREASE
GROOVE
GIMLET

OUTILLAGE ET TERMES

D'ATELIER

COMPAS
CUIVRE
FIL DE CUIVRE
HOUSSE, COUVERCLE
BOUCHON
FENTE
PINCE, LEVIER
PINCE COUPANTE

DEGRÉ

ÉBONIT
FIL ÉLECTRIQUE
TOILE ÉMERI
VIDANGE

GRAISSE
LIME
BRIDE
PINCE PLATE
ENTONNOIR

GALVANISÉ
ESSENCE
JAUGE
GRAISSE
GORGE
VRILLE

TOOLS AND SHOP**TERMS**

HAMMER
HAND DRILL
HANDLE

INSULATOR
IRON
IRON MOUNTING
IRON WIRE

JACK
JACK SCREW
JOINT

KEROSENE
KEY
KNOT

LAG SCREW
LATHE
LEAD
LEAKAGE
LEVER
LINK
LINK MOTION

MANDREL
MICA
MINERAL OIL

OUTILLAGE ET TERMES**D'ATELIER**

MARTEAU
FORET
POIGNÉE

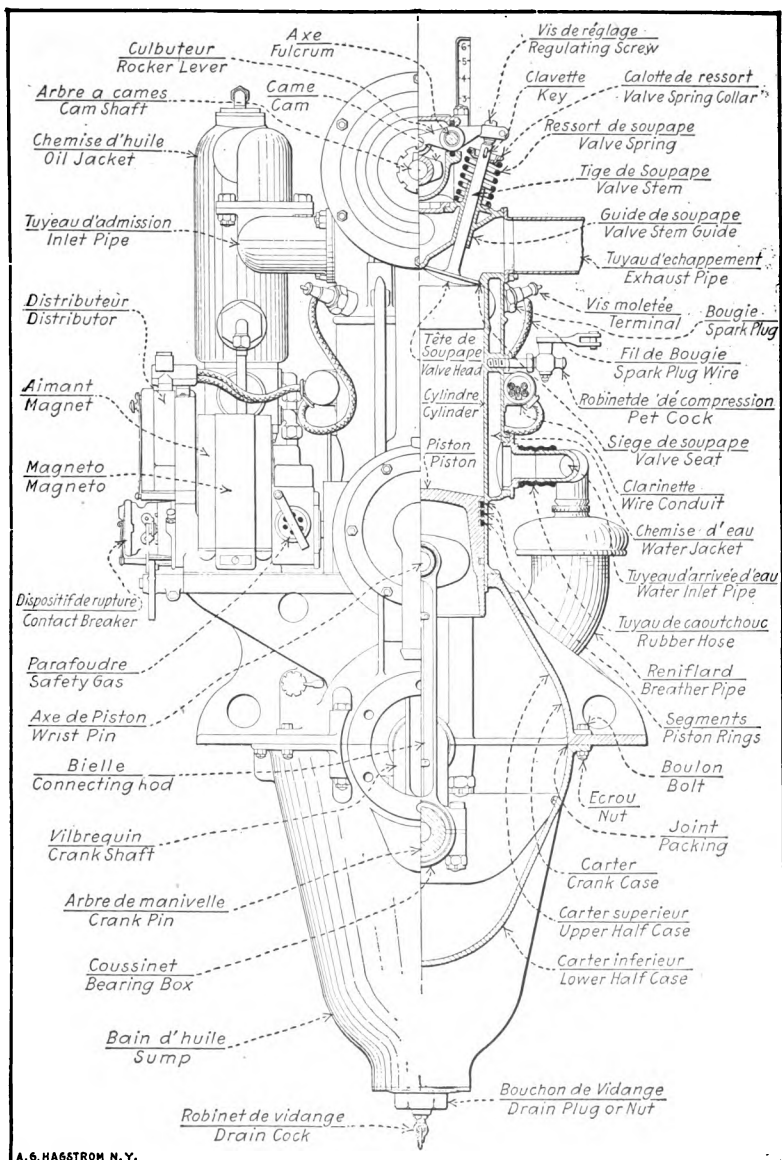
ISOLANT
FER
FERRURE
FIL DE FER

CRIC
VÉRIN
RACCORD

PÉTROLE (Lampant)
CLAVETTE
NŒUD

TIREFONDS
TOUR
PLOMB
FUIITE
LEVIER
MAILLON
COULISSE

MANDRIN
MICA
HUILE MINÉRALE



A. G. HAGSTROM N. Y.

FIG. 5.—PART SECTIONAL END VIEW OF HALL-SCOTT AIRPLANE ENGINE
SHOWING IMPORTANT PARTS
MOTEUR D'AVION HALL-SCOTT DEMIE COUPE, MONTRANT LES PARTIES
IMPORTANTES

TOOLS AND SHOP

TERMS

NAIL
NICKEL
NOTCH
NUT

OIL
OIL CAN
OIL STONE
OPENING

PACKING
PARRAFIN
PETROL
PIN
PINNED AND BRAZED
JOINT

PIPE
PIPING
PISTON STROKE
PLATINUM
PLUG
PRESSED STEEL
PUMICE STONE
PUMP

RASP
REINFORCEMENT
SLEEVE
RING

OUTILLAGE ET TERMES

D'ATELIER

CLOU
NICKEL
CRAN
ÉCROU

HUILE
BURETTE
PIERRE À AFFUTER
ORIFICE, OUVERTURE

JOINT
PARAFINE
ESSENCE
GOUPILLE
RACCORD GOUPILLÉ
ET BRASÉ

TUYAU
TUYAUTERIE
COURSE DU PISTON
PLATINE
BOUCHON
TÔLE EMBOUTIE
PIERRE PONCE
POMPE

RAPE
FOURRURE

BAGUE, ANNEAU

TOOLS AND SHOP
TERMS

ROD
ROLLED
ROUND NOSE PLIERS
RUBBER
RUSTY

SAND
SAND PAPER
SAW
SCISSORS
SCREW
SCREW DRIVER
SHEET IRON
SHELLAC
· SHORT CIRCUIT
SLEDGE HAMMER
SOAP
SOCKET
SOLDERING
SPACING SHIMS
SPANNER
SPARK
SPINDLE
SPIRIT
SPLASHING
SPLIT PIN
SPLIT WASHER
SPRING
STAND

OUTILLAGE ET TERMES
D'ATELIER

TIGE, BARRE
LAMINÉ
PINCE RONDE
CAOUTCHOUC
ROUILLÉ

SABLE
PAPIER DE VERRE
SCIE
CISEAUX
VIS
TOURNE-VIS
TÔLE
LAQUE
COURT-CIRCUIT
MASSE
SAVON
DOUILLE
SOUDER À L'ÉTAIN
CALE D'ÉPAISSEUR
CLEF
ÉTINCELLE
BROCHE
ESSENCE
BARBOTTAGE
GOUPILLE FENDUE
RONDELLE GROVER
RESSORT
TORON

TOOLS AND SHOP
TERMS

STEM
STEEL
STEEL PLATE
STEEL WIRE
STRAIGHT PIN

STRAINER

TAPE
TAPER PIN
THREAD
THUMB SCREW
TIGHT
TIN
TIN PLATE
TOOLS
TO BEND

TO BORE
TO CAST
TO CLAMP
TO DISTORT
TO FASTEN

TO FORGE
TO FREE UP
TO GREASE
TO GRIND
TO GRIP

OUTILLAGE ET TERMES
D'ATELIER

TIGE
ACIER
TÔLE D'ACIER
CABLE D'ACIER
GOUPILLE CYLIN-
DRIQUE
CRÉPINE

CHATERTUN
GOUPILLE CONIQUE
FIL
VIS À OREILLE
ÉTANCHE
ÉTAİN
FER BLANC ÉTAMÉ
OUTILS
FAUSSER, FLAMBER,
PLIER, TORDRE
PERCER
FONDRE
CRAMPONNER
FAUSSER, TORDRE
FIXER, ATTACHER,
SERRER
FORGER
DÉGRIPPER
GRAISSER
RODER
GRIPPER

**TOOLS AND SHOP
TERMS**

TO HOLLOW
TO LINE UP

TO LUBRICATE
TO MELT
TO PIERCE
TO RIVET
TO SCREW
TO SEIZE
TO SOLDER
TO SPRING
TO STAMP
TO STRAIGHTEN
TO STRENGTHEN
TO SUPPLY

TO TAPER
TO TAKE APART
TO TIE
TO UNSCREW
TO WASH
TUBE
TUBULAR

UNIVERSAL DRIVING
SHAFT
USAGE

**OUTILLAGE ET TERMES
D'ATELIER**

EMBOUITIR
REDRESSER, DÉTOR-
DRE
GRAISSER
FONDRE
PERCER
RIVER
VISSER, SERRER
GRIPPER
SOUDER À L'ÉTAİN
FAUSSER, TORDRE
ÉSTAMPER
REDRESSER
RENFORCER
FOURNIR, ALIMEN-
TER, APPROVISION-
NER
ÉFFILER
DÉMONTER
ATTACHER, LIER
DÉVISSER
LAVER
TUBE
TUBULAIRE

TRANSMISSION À LA
CARDAN
USURE

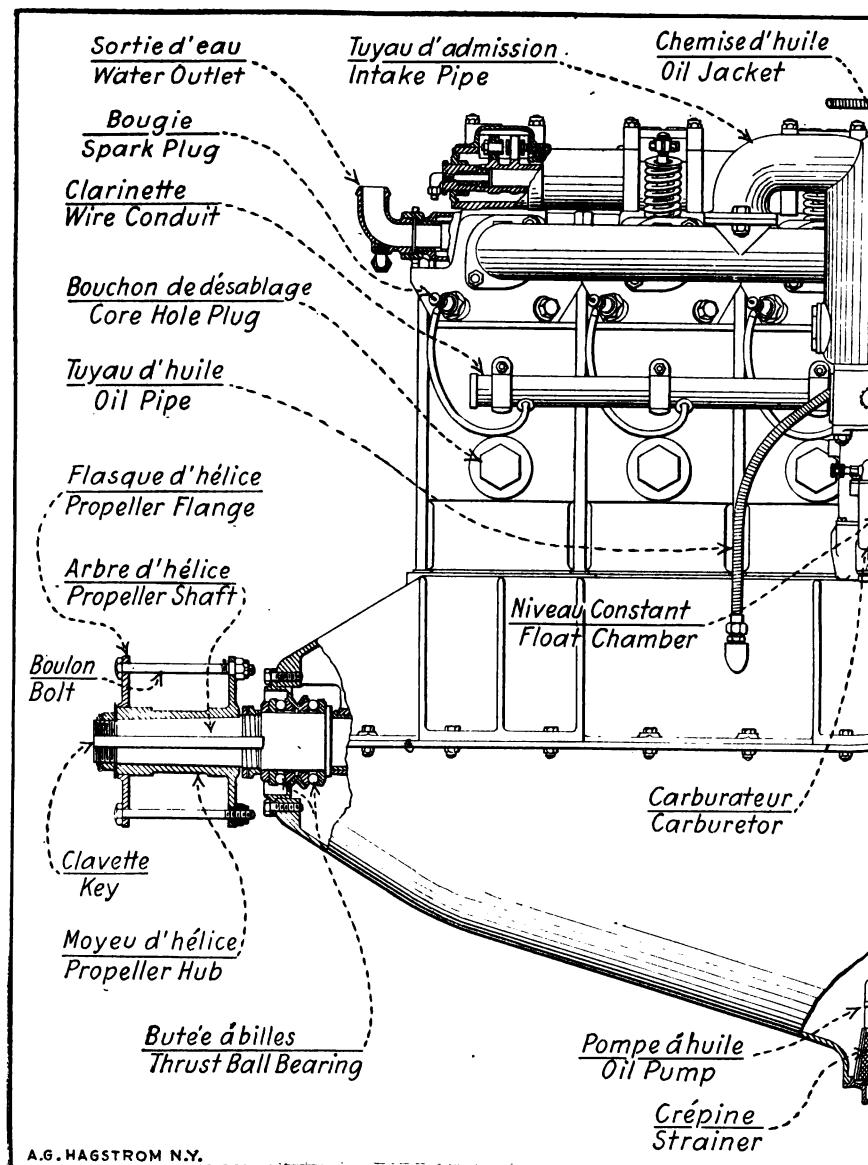
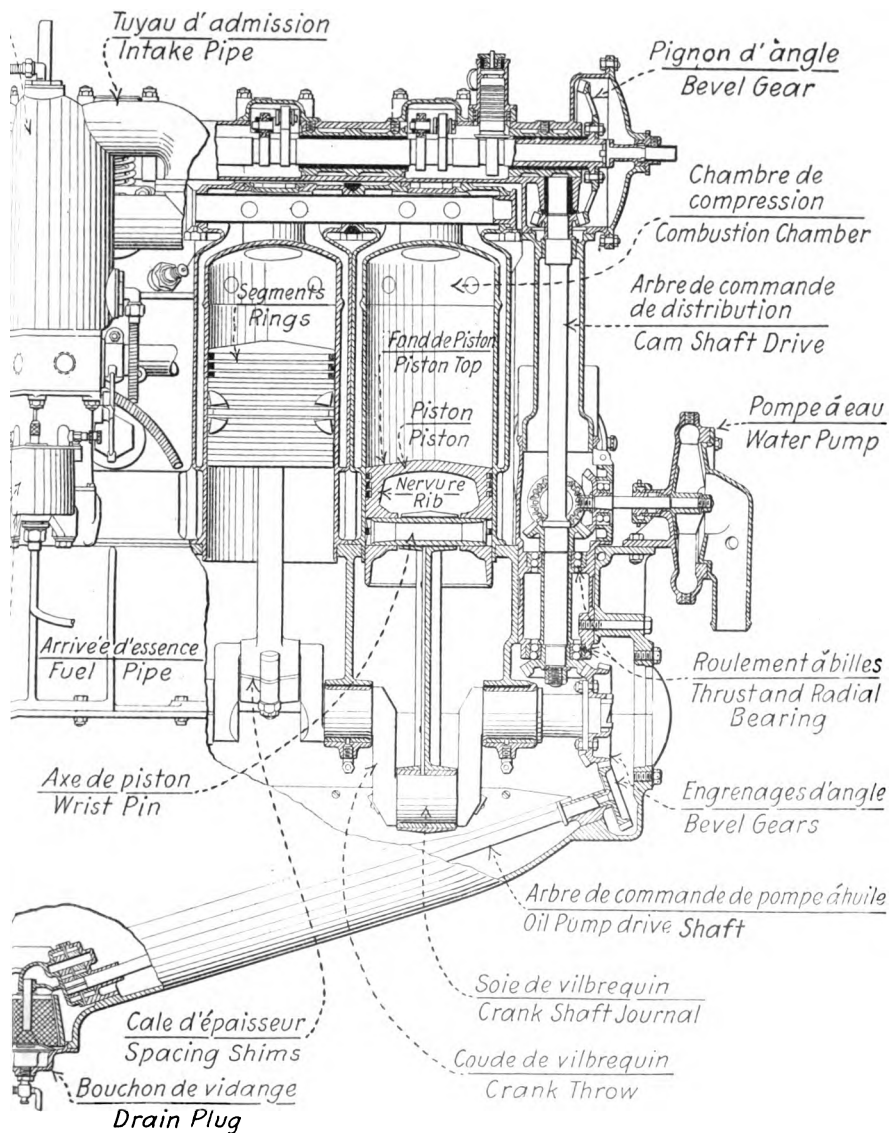


FIG. 6.—PART SECTIONAL VIEW OF SIX-CYLINDER
MOTEUR D'AVION SIX CYLINDRES HALL-SCOTT DI



: HALL-SCOTT ENGINE SHOWING IMPORTANT PARTS
MIE COUPE, MONTRANT LES PARTIES PRINCIPALES

TOOLS AND SHOP
TERMS

VARNISH

WISE

WASHER

WASTE

WEDGE

WIRE CLOTH

WORKSHOP

ZINC

OUTILLAGE ET TERMES
D'ATELIER

VERNIS

ÉTAU

RONDELLE

ÉTOUPE

CHEVILLE

TISSU MÉTALLIQUE

ATELIER

ZINC

Metric System and English Equivalents.

The Metric System is based on the Meter which was designed to be one ten-millionth ($\frac{1}{10,000,000}$) part of the earth's meridian, passing through Dunkirk and Formentera. Later investigations, however, have shown that the Meter exceeds one ten-millionth part by almost one part in 6400. The value of the Meter, as authorized by the U. S. Government is 39.37 inches. The Metric system was legalized by the U. S. Government in 1866.

The three principal units are the meter, the unit of length, the liter, the unit of capacity, and the gram, the unit of weight. Multiples of these are obtained by prefixing the Greek words: deka (10), hekto (100), and kilo (1000). Divisions are obtained by prefixing the Latin words: deci ($\frac{1}{10}$), centi ($\frac{1}{100}$), and milli ($\frac{1}{1000}$). Abbreviations of the multiples begin with a capital letter, and of the divisions with a small letter, as in the following tables:

Measures of Length

10 millimeters (mm.)	= 1 centimeter (cm.)	= .3937 in.
10 centimeters	= 1 decimeter (dm.)	
10 decimeters	= 1 meter (m.)	= 3.28083 ft. = 39.37 ins.
10 meters	= 1 dekameter (Dm.)	
10 dekameters	= 1 hektometer (Hm.)	
10 hektometers	= 1 kilometer (Km.)	= 0.62137 mile
1 foot	= .3048 meter	
1 inch	= 25.4 millimeters	

Measures of Surface (not Land)

100 square millimeters (mm. ²)	= 1 square centimeter (cm. ²)	= 0.155 sq. in.
100 square centimeters	= 1 square decimeter (dm. ²)	
100 square decimeters	= 1 square meter (m. ²)	= 10.764 sq. ft.
1 square yard	= .836 square meter	
1 square foot	= .0929 square meter	
1 square inch	= 645.2 square millimeters	

Measures of Volume

1000 cubic millimeters (mm. ³)	= 1 cubic centimeter (cm. ³)	= .061 cu. in.
1000 cubic centimeters	= 1 cubic decimeter (dm. ³)	= 1 liter = 61.023 cu. ins.
1000 cubic decimeters	= 1 cubic meter (m. ³)	= 35.314 cu. ft. = 264.2 gallons
1 cubic yard	= .7645 cubic meter	
1 cubic foot	= .02832 cubic meter	
1 cubic inch	= 16.387 cubic centimeters	

Measures of Capacity

10 milliliters (ml.)	= 1 centiliter (cl.)	
10 centiliters	= 1 deciliter (dl.)	
10 deciliters	= 1 liter (l.)	= 1.0567 qts. (U.S.) = 61.023 cu. ins.
10 liters	= 1 dekaliter (Dl.)	
10 dekaliters	= 1 hektoliter (Hl.)	
10 hektoliters	= 1 kiloliter (Kl.)	
1 gallon (U.S.)	= 3.785 liters	
1 gallon (British)	= 4.543 liters	

Measures of Weight

10 milligrams (mg.)	= 1 centigram (cg.)	
10 centigrams	= 1 decigram (dg.)	
10 decigrams	= 1 gram (g.)	= 15.432 grains
10 grams	= 1 dekagram (Dg.)	
10 dekagrams	= 1 hektogram (Hg.)	
10 hektograms	= 1 kilogram (Kg.)	= 2.2046 pounds
1000 kilograms	= 1 ton (T)	= .8842 ton of 2240 pounds

NOTE—The gram is the weight of one cubic centimeter of pure distilled water at a temperature of 39.2°F.; the kilogram is the weight of 1 liter of water; the ton is the weight of 1 cubic meter of water.

1 grain	= .0648 gram	1 ounce (Avo.)	= 28.35 grams
1 pound	= 453.6 kilograms	1 ton of 2240 pounds	= 1,016 metric tons

TIME PER MILE EXPRESSED IN MILES PER HOUR

Time for one mile Min. Sec.			Miles Per hour			Time for one mile Min. Sec.			Miles Per hour			Time for one mile Min. Sec.			Miles Per hour		
0	36	=	100.00	1	12	=	50.00	1	47	=	33.64	1	47	=	33.64		
0	37	=	97.30	1	13	=	49.31	1	48	=	33.33	1	48	=	33.33		
0	38	=	94.74	1	14	=	48.65	1	49	=	33.03	1	49	=	33.03		
0	39	=	92.31	1	15	=	48.00	1	50	=	32.72	1	50	=	32.72		
0	40	=	90.00	1	16	=	47.37	1	51	=	32.43	1	51	=	32.43		
0	41	=	87.80	1	17	=	46.75	1	52	=	32.14	1	52	=	32.14		
0	42	=	85.71	1	18	=	46.15	1	53	=	31.86	1	53	=	31.86		
0	43	=	83.72	1	19	=	45.57	1	54	=	31.58	1	54	=	31.58		
0	44	=	81.82	1	20	=	45.00	1	55	=	31.30	1	55	=	31.30		
0	45	=	80.00	1	21	=	44.44	1	56	=	31.03	1	56	=	31.03		
0	46	=	78.26	1	22	=	43.90	1	57	=	30.77	1	57	=	30.77		
0	47	=	76.60	1	23	=	43.37	1	58	=	30.50	1	58	=	30.50		
0	48	=	75.00	1	24	=	42.86	1	59	=	30.25	1	59	=	30.25		
0	49	=	73.47	1	25	=	42.35	2	0	=	30.00	2	0	=	30.00		
0	50	=	72.00	1	26	=	41.86	2	3	=	29.26	2	3	=	29.26		
0	51	=	70.59	1	27	=	41.38	2	6	=	28.57	2	6	=	28.57		
0	52	=	69.23	1	28	=	40.91	2	9	=	27.90	2	9	=	27.90		
0	53	=	67.92	1	28	=	40.91	2	9	=	27.90	2	9	=	27.90		
0	54	=	66.67	1	29	=	40.45	2	12	=	27.27	2	12	=	27.27		
0	55	=	65.45	1	30	=	40.00	2	15	=	26.66	2	15	=	26.66		
0	56	=	64.29	1	31	=	39.56	2	18	=	26.08	2	18	=	26.08		
0	57	=	63.16	1	32	=	39.13	2	21	=	25.53	2	21	=	25.53		
0	58	=	62.07	1	33	=	38.71	2	24	=	25.00	2	24	=	25.00		
0	59	=	61.02	1	34	=	38.30	2	27	=	24.49	2	27	=	24.49		
1	0	=	60.00	1	35	=	37.89	2	30	=	24.00	2	30	=	24.00		
1	1	=	59.02	1	36	=	37.50	2	33	=	23.53	2	33	=	23.53		
1	2	=	58.06	1	37	=	37.11	2	36	=	23.07	2	36	=	23.07		
1	3	=	57.14	1	38	=	36.73	2	39	=	22.64	2	39	=	22.64		
1	4	=	56.25	1	39	=	36.36	2	42	=	22.22	2	42	=	22.22		
1	5	=	55.38	1	40	=	36.00	2	45	=	21.81	2	45	=	21.81		
1	6	=	54.55	1	41	=	35.64	2	48	=	21.42	2	48	=	21.42		
1	7	=	53.73	1	42	=	35.29	2	51	=	21.05	2	51	=	21.05		
1	8	=	52.94	1	43	=	34.95	2	54	=	20.69	2	54	=	20.69		
1	9	=	52.17	1	44	=	34.61	3	0	=	20.00	3	0	=	20.00		
1	10	=	51.42	1	45	=	34.28						
1	11	=	50.70	1	46	=	33.96						

ENGLISH AND METRIC SPEED EQUIVALENTS

To obtain velocity in feet per second multiply the speed in miles per hour by 1.466+

Velocity ft. per sec. = Miles per hour x 1.466+

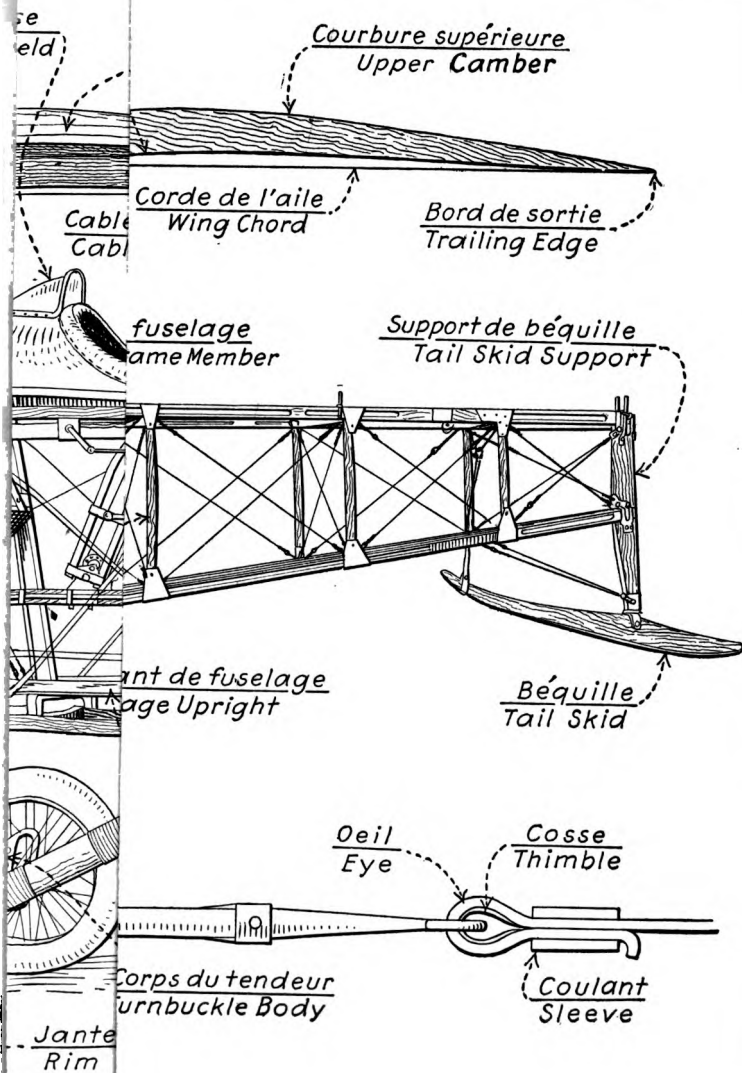
One mile per hour = 1.466 ft. per second = 88 ft. per minute = 0.447 meters per second = 26.8 metres per minute.

1 Km. per hour = 0.914 metres per second = 54.9 ft. per minute = 0.624 mi. per hour.

Table of Decimal Equivalents of Millimeters and Fractions of Millimeters

Mm. Inches	Mm. Inches	Mm. Inches
$\frac{1}{30} = .00079$	$\frac{3}{80} = .02047$	2 = .07874
$\frac{2}{30} = .00157$	$\frac{7}{80} = .02126$	3 = .11811
$\frac{3}{30} = .00236$	$\frac{9}{80} = .02205$	4 = .15748
$\frac{4}{30} = .00315$	$\frac{11}{80} = .02283$	5 = .19685
$\frac{5}{30} = .00394$	$\frac{13}{80} = .02362$	6 = .23622
$\frac{6}{30} = .00472$	$\frac{15}{80} = .02441$	7 = .27559
$\frac{7}{30} = .00551$	$\frac{17}{80} = .02520$	8 = .31496
$\frac{8}{30} = .00630$	$\frac{19}{80} = .02598$	9 = .35433
$\frac{9}{30} = .00709$	$\frac{11}{40} = .02677$	10 = .39370
$\frac{10}{30} = .00787$	$\frac{13}{40} = .02756$	11 = .43307
$\frac{11}{30} = .00866$	$\frac{15}{40} = .02835$	12 = .47244
$\frac{12}{30} = .00945$	$\frac{17}{40} = .02913$	13 = .51181
$\frac{13}{30} = .01024$	$\frac{19}{40} = .02992$	14 = .55118
$\frac{14}{30} = .01102$	$\frac{11}{20} = .03071$	15 = .59055
$\frac{15}{30} = .01181$	$\frac{13}{20} = .03150$	16 = .62992
$\frac{16}{30} = .01260$	$\frac{15}{20} = .03228$	17 = .66929
$\frac{17}{30} = .01339$	$\frac{17}{20} = .03307$	18 = .70866
$\frac{18}{30} = .01417$	$\frac{19}{20} = .03386$	19 = .74803
$\frac{19}{30} = .01496$	$\frac{11}{10} = .03465$	20 = .78740
$\frac{20}{30} = .01575$	$\frac{13}{10} = .03543$	21 = .82677
$\frac{21}{30} = .01654$	$\frac{15}{10} = .03622$	22 = .86614
$\frac{22}{30} = .01732$	$\frac{17}{10} = .03701$	23 = .90551
$\frac{23}{30} = .01811$	$\frac{19}{10} = .03780$	24 = .94488
$\frac{24}{30} = .01890$	$\frac{11}{5} = .03858$	25 = .98425
$\frac{25}{30} = .01969$	1 = .03937	26 = 1.02362

10 mm. = 1 Centimeter = 0.3937 inches.
 10 cm. = 1 Decimer = 3.937 inches.
 10 dm. = 1 Meter = 39.37 inches.
 25.4 mm. = 1 English inch.



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VERED ACTION OF CONTROL MEMBERS, ETC.

FUSELAGE ES, ETC.

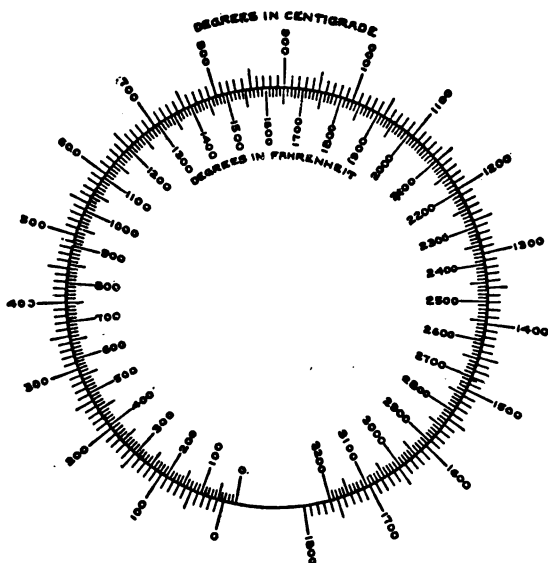


FIG. 8.—COMPARATIVE SCALE—FAHRENHEIT AND CENTIGRADE THERMOMETERS

TEMPERATURE CONVERSION FACTORS

Boiling-point of
water at sea level

Fahrenheit thermometer . . 212 degrees

Centigrade thermometer . . 100 degrees

Reaumur thermometer . . . 80 degrees

Degrees Fahrenheit =

Degrees Centigrade =

Degrees Reaumur =

$$\frac{\text{Degrees Centigrade} \times 9}{5} + 32 = \frac{\text{Degrees Reaumur} \times 9}{4} + 32$$

$$\frac{(\text{Degrees Fahrenheit} - 32) \times 5}{9} = \frac{\text{Degrees Reaumur} \times 5}{4}$$

$$\frac{\text{Degrees Centigrade} \times 4}{5} = \frac{(\text{Degrees Fahrenheit} - 32) \times 4}{9}$$

GLOSSARY OF
AVIATION TERMS
FRENCH—ENGLISH

TERMES D'AVIATION

FRANCAIS—ANGLAIS

TERMES EMPLOYÉS SUR L'AERODROME

ACROBATIES

AERONAT

ALTIMÈTRE

ALTITUDE

ANGLE D'ATTAQUE

ANGLE D'INCIDENCE

ATTERRIR

ATTERRISSAGE

AVION

AVION DE CHASSE

AVION DE RECONNAIS-
SANCE

AVION DE BOMBARDEMENT

AVIATEUR

BALLON

BAROGRAPHE

FLYING FIELD TERMS

STUNTS

AIRSHIP

HEIGHT INDICATOR—
ALTIMETER

ALTITUDE

ANGLE OF ATTACK

ANGLE OF INCIDENCE
TO LAND

LANDING

AIRPLANE

BATTLING PLANE

RECONNOITERING PLANE

BOMBARDING PLANE

AVIATOR, AIRMAN

BALLOON

BAROGRAPH

TERMES EMPLOYÉS SUR
L'AERODROME

BESSONNEAU (HANGAR) (du nom du constructeur)
BOUSSOLE

CABRER, CABRÉ
CALE
CAPOTER

CARTE
CASQUE
CENTRE DE GRAVITÉ
CENTRE DE POUSSÉE
CENTRE DE PRESSION
CHANDELLE (Comm.)
CHAUSSENS FOURRÉS
CHEVAL DE BOIS
(Comm.) (Tournant involontaire au sol)

COÉFFICIENT DE SÉCURITÉ
COMBINAISON
COUPER L'ALLUMAGE
COUCOU (Comm.)
COURBURE

DÉCALÉS (PLANS)

FLYING FIELD
TERMS

CANVAS HANGAR
(from the name of the maker)
COMPASS

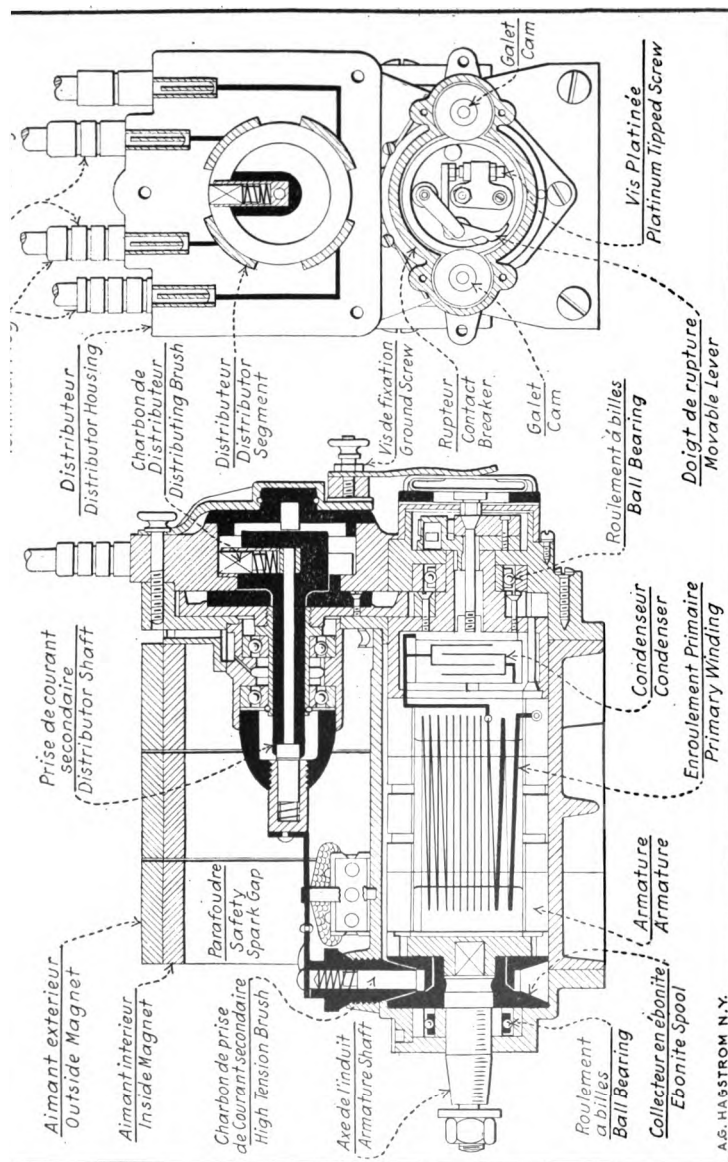
TO NOSE UP
CHOCK
TO TURN OVER, TO
SOMERSAULT

MAP
HELMET
CENTER OF GRAVITY
CENTER OF THRUST
CENTER OF PRESSURE
ZUHM, ZUHMING, ZOOM
FUR LINED BOOTS
CARROUSEL (MERRY-GO-ROUND) (Involuntary turning sharp on the ground)

FACTOR OF SAFETY

UNION SUIT
TO SWITCH OFF
PLANE, BUS (Comm.)
CAMBER

STAGGERED WINGS



A.G. HASTROM N.Y.

Fig. 9.—VIEWS SHOWING PRINCIPAL PARTS OF HIGH-TENSION IGNITION MAGNETOS
VUE DES PRINCIPALES PARTIES D'UNE MAGNETO D'ALLUMAGE À HAUTE TENSION

TERMES EMPLOYÉS SUR
L'AERODROME

FLYING FIELD
TERMS

DÉCOLLER

TO LEAVE THE
GROUND

DÉPORTER

TO DRIFT

(être déporté)

(to be drifted)

DÉRAPER

DÉRIVE

DIÈDRE

DRIFT, WINDWAY

DIHEDRAL

DOUBLE COMMANDE

DUAL CONTROL

DRAP D'ATERRIS-
SAGE

LANDING SHEET

ENGIN

APPARATUS

ENVERGURE

WING SPAN

ÉQUILIBRE

BALANCE, EQUILIB-
RIUM

ESCADRILLE

SQUADRON

FEU D'ATERRISSAGE

FLARE

FEUILLE MORTE

DEAD LEAF

(descente en)

FORCE ASCENSION-
NELLE

FORCE DE SUSTENTA-
TION

LIFT

FORCE MOTRICE

MOTIVE POWER

GANTS FOURRÉS

FUR LINED GLOVES

GAUCHIR

TO BANK (or any action
on lateral control)

TERMES EMPLOYÉS SUR
L'AERODROME

FLYING FIELD
TERMS

GAUCHISSEMENT
GLISSADE SUR L'AILE
GLISSADE SUR LA
QUEUE

WING WARPING
SIDE CLIP
TAIL DIVE

HANGAR
HYDROAEROPLANE

HANGAR
{HYDROAIRPLANE,
SEAPLANE

INCIDENCE
INCIDENCE VARIABLE

INCIDENCE
CHANGEABLE ANGLE
OF INCIDENCE

INCLINER
INDICATEUR DE
VITESSE

TO TILT, TO BANK
SPEED INDICATOR

LIGNE DE VOL
LOOPING
LUNETTES

LINE OF FLIGHT
LOOPING THE LOOP
GOGGLES

MANCHE À VENT
MARCHER EN CRABE
METTRE LE CONTACT
METTRE EN MARCHÉ

WIND CONE
CRABBING
TO SWITCH ON
TO START THE
ENGINE

MONTER
MOTEUR

TO CLIMB
ENGINE

NACELLE

BASKET OR CAR

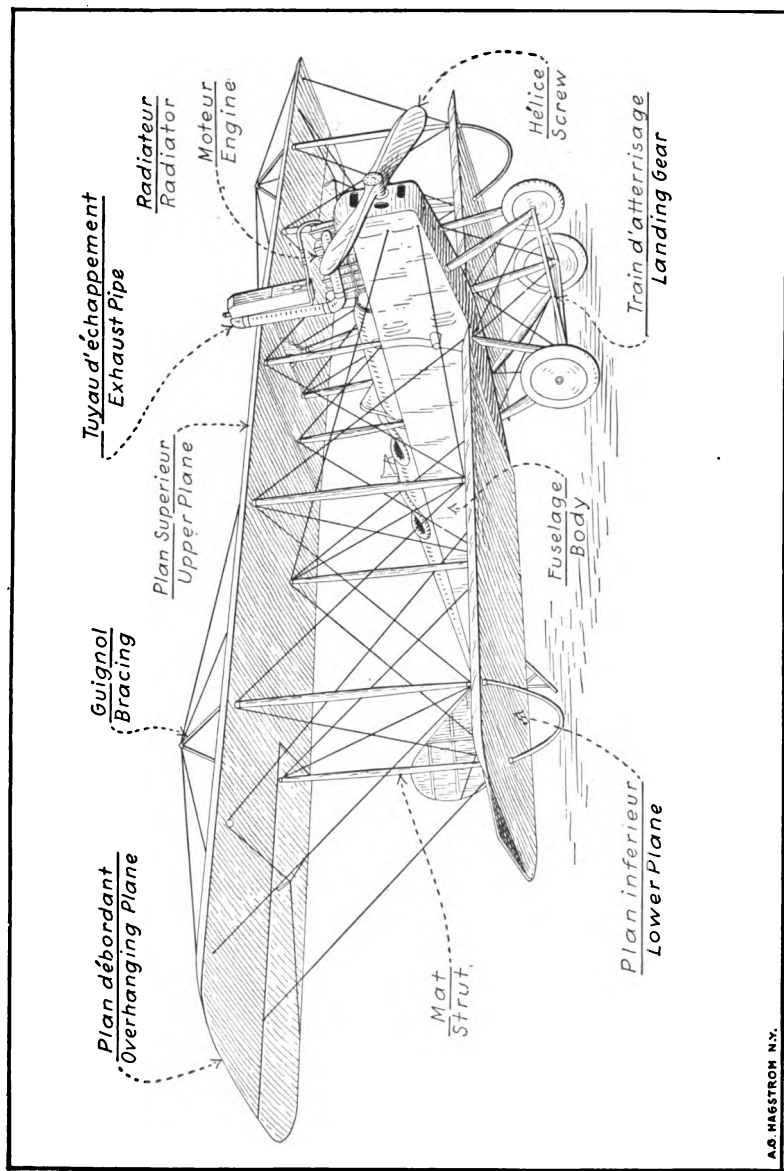


FIG. 10.—THREE-QUARTER FRONT VIEW OF TRACTOR BIPLANE
 BIPLAN À HÉLICE TRACTIVE VU DE TROIS-QUARTS

A. S. HAGSTROM N.Y.

TERMES EMPLOYÉS SUR
L'AERODROME

OBSERVATEUR
ORIENTATION
ORIENTER (S')

PANNE
PAS D'HÉLICE
PENCHER
PERTE DE VITESSE
(Atterrissage)
PERTE DE VITESSE
(en l'air)

PILOTE
PIQUER

PLAFOND }
PLAFONNER }
PLANER (Volplane)
PYLONE

SE METTRE EN
PYLONE

RALENTI
RASE MOTTES
(faire du)
RÉGIME

FLYING FIELD
TERMS

OBSERVER
ORIENTATION
To find one's position or
one's way

BREAKDOWN
PROPELLER PITCH
TO BANK, TO TILT
PANCAKE
(Landing)
STALL

PILOT
TO DIVE, TO NOSE
DOWN

END OF CLIMB

GLIDE
PYLON

LANDING ON NOSE
& REMAINING TAIL
HIGH

SLOW SPEED
GRASS CUTTING
(flight)
SPEED OF ROTATION

TERMES EMPLOYÉS SUR
L'AERODROME

RÉGLAGE

RÉGLAGE DE L'INCLINANCE

REMOUS

RENVERSEMENT

RÉSISTANCE À
L'AVANCEMENT

ROULER AU MOTEUR

SOUFFLER (un avion)
SURVOLER

TANGENT

TAXI (Comm.)

TERRAIN D'ATTER-
RISSAGE

TRAJECTOIRE

VIRAGE

VRILLE

ZINC (Comm.)

L'AVION

AILERONS

FLYING FIELD
TERMS

REGULATION, AD-
JUSTMENT

WASH IN, WASH OUT

ROCKING

TURN OVER ON THE
WING

DRAG

TO TAXI

PROPELLER WASH
TO FLY OVER

LOGGY, SLUGGISH
PLANE, BUS (Comm.)
LANDING GROUND

TRAJECTORY

TURNING, VEERING
TAIL SPIN

PLANE, BUS (Comm.)

THE PLANE

TILTING WINGS,
WING FLAPS

L'AVION

AILES
 ALTIMÈTRE
 ARAIGNÉE DE
 MOTEUR
 ARÉTIER ARRIERE
 ARÉTIER AVANT
 ATTACHE
 ATTACHE D'AILE
 ATTACHER
 AVION

 BALAI (MANCHE À)

 BAROGRAPHE
 BÉQUILLE
 BERCEAU DE MOTEUR
 BIPLACE
 BIPLAN
 BLINDAGE
 BOIS CREUX
 BORD D'ATTAQUE
 BORD DE SORTIE
 BOULON
 BOURRELETS
 BOUSOLE
 BOWDEN
 BRAS { Avant } D'AILE
 { Arrière }

THE PLANE

WINGS, PLANES
 HEIGHT INDICATOR,
 ALTIMETER
 ENGINE SUPPORT
 SPIDER
 TRAILING EDGE
 LEADING EDGE
 FASTENING
 WING SUPPORT
 TO TIE
 AIRPLANE, PLANE

 CONTROL STICK (JOY
 STICK)
 BAROGRAPH
 TAIL SKID, SPRAG
 ENGINE BED
 TWO-SEATERS
 BIPLANE
 SHEETING
 HOLLOW WOOD
 LEADING EDGE
 TRAILING EDGE
 BOLT
 PADDING
 COMPASS
 FLEXIBLE SHAFT
 WING SPAR { Front
 Back }

L'AVION

CABANE
 CABLE

 CAPOT
 CARLINGUE
 CEINTURE DE SURETÉ
 CEINTURE LOOPING

 CELLULE
 CHARNIÈRE
 CHASSIS
 COMMANDES

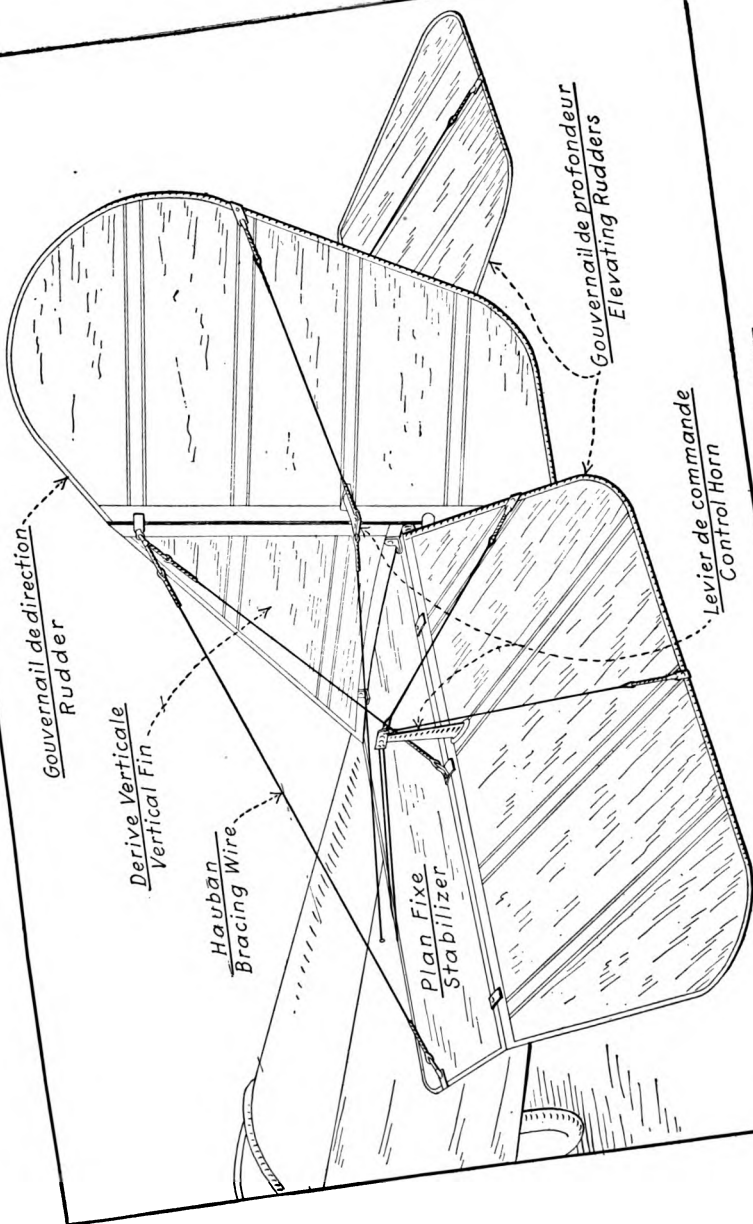
 COMMANDES À PONT

 COMPTE TOURS
 CONTACT
 CONTRE FICHE
 (Train d'atterrissage)
 CONTREPLAQUÉ
 CORDE
 CORDE (Geometrie)
 CORDE À PIANO

 COSSE
 COULANT
 COURBURE
 COUSSIN
 CROISILLON

THE PLANE

CABANE
 CABLE, STRANDED
 WIRE
 HOOD, COIL
 COCKPIT
 SAFETY BELT
 SAFETY BELT WITH
 SUSPENDERS
 CELLULE
 HINGE, KNUCKLE
 FRAME
 CONTROLLING ELE-
 MENTS
 CONTROL BRIDGE
 (Deperdussin-Curtiss)
 TACHOMETER
 SWITCH
 BRACING STRUT
 (Landing gear)
 LAMINATED WOOD
 ROPE
 CHORD (Geometry)
 PIANO WIRE, HARD
 WIRE
 THIMBLE
 SLEEVE
 BEND, CAMBER
 CUSHION
 BRACING



AS. HAUSTROM NY.

FIG. 11.—VIEW OF AIRPLANE EMPENNAGE
EMPENNAGE D'AVION

<u>L'AVION</u>	<u>THE PLANE</u>
DÉRIVE	TAIL FIN
ÉCROU	NUT
EMPENNAGE	STABILITY PLANES OF THE TAIL
ENDUIT	DOPE
ENTOILAGE	WING COVERING
ENVERGURE	WING SPAN
ESSIEU	AXLE
ETRIER	STIRRUP
EXTENSEUR	SHOCK ABSORBER
FERRURES	FITTINGS
FLASQUE D'HÉLICE	PROPELLER FLANGE
FREIN (de cable)	SAFETY WIRE
FUSÉE D'ESSIEU	AXLE SPINDLE
FUSELAGE	BODY, FUSIFORM FRAME
GLISSIÈRE	GUIDE, SLIDE
GODETS	FITTINGS
GOUVERNAIL DE DIRECTION	RUDDER
GOUVERNAIL DE PROFONDEUR	ELEVATOR
GUIGNOL	HORN, BRACING POST
HAUBAN	BRACING WIRES PROPELLER, SCREW
HAUBANNAGE	
HÉLICE	

L'AVION

HÉLICE TRACTIVE
HÉLICE PROPULSIVE

HOUSSE

JAMBE DE FORCE
(Train d'atterrissage)
JANTE

LONGERON

MANCHE À BALAI

MANETTE
MARCHEPIED
MAROUFLAGE

MAT }
MONTANT }
MONOPLACE
MONOPLAN
MOYEU

NERVURES

PALE D'HÉLICE
PALONNIER

PANNEAU
PARE BRISE

THE PLANE

TRACTOR SCREW
PROPELLER, PUSHER
SCREW
COVER

BRACING STRUT
(Landing gear)
RIM

LONGERON, LONGITU-
DINAL SPAR

CONTROL STICK, JOY
STICK

THROTTLE
FOOT PAD
CLOTH WINDING

STRUT
SINGLE SEATER
MONOPLANE
HUB

WING RIBS

BLADE OF SCREW
FOOT LEVER, RUDDER
BAR
SIDE PANEL
WIND SHIELD

L'AVION

PATIN, PATINNAGE
PATIN DE GLISSIÈRE

PÉDALE
PERSIENNES
PIED
PLAN
PLAN CENTRAL
PLAN DÉBORDANT
PLAN DE DÉRIVE
PLAN FIXE DE QUEUE
PLANCHER
PNEU, PNEUMATIQUE
POIGNÉE
POMPE À PRESSION
PORTE-CARTES
PORTE DE VISITE

POULIE
PROFIL
PROFILER

QUEUE

RAYONS
RÉSERVOIR
RÉSERVOIR EN
CHARGE

THE PLANE

SKID, RUNNER
BRONZE BEARING OF
AXLE GUIDE

PEDAL
LOUVRES
SUPPORTING CASTING
PLANE, WING
CENTRAL PANEL
OVERHANG
STABILIZING FIN
STABILIZER
FLOORING
TIRE
HANDLE
PRESSURE PUMP
MAP-HOLDER
DOOR FOR EXAMINA-
TION
PULLEY
FAIRING
TO FAIR, TO STEAM
LINE

TAIL

SPOKES
TANK
GRAVITY TANK

<u>L'AVION</u>	<u>THE PLANE</u>
RÉSERVOIR SOUS PRESSION	PRESSURE TANK
ROUE	WHEEL
SANDOW (Amortisseur) (Comm.)	SHOCK ABSORBER
SEMELLE DE PATIN- NAGE	SKID RUNNER
SIÈGE	SEAT
STABILISATEUR ou GOVERNAIL DE PROFONDEUR	ELEVATOR, FLIPPERS
TENDEUR	WIRE STAY, TURN BUCKLE
TIGE DE TRANSMIS- SION	CONNECTING LINK
TIRANT	BRACING TUBES
TOILE	LINEN
TOURELLE	TURRET
TRAIN D'ATERRIS- SAGE	LANDING GEAR
TRANSFIL	CORD WINDING
TRANSMISSION FLEX- IBLE ou BOWDEN	FLEXIBLE SHAFT (Bowden wire)
TRIPLACE	THREE-SEATERS
TRIPLAN	TRIPLANE
TUBE	TUBE
TUBE DE NIVEAU	GLASS GAUGE

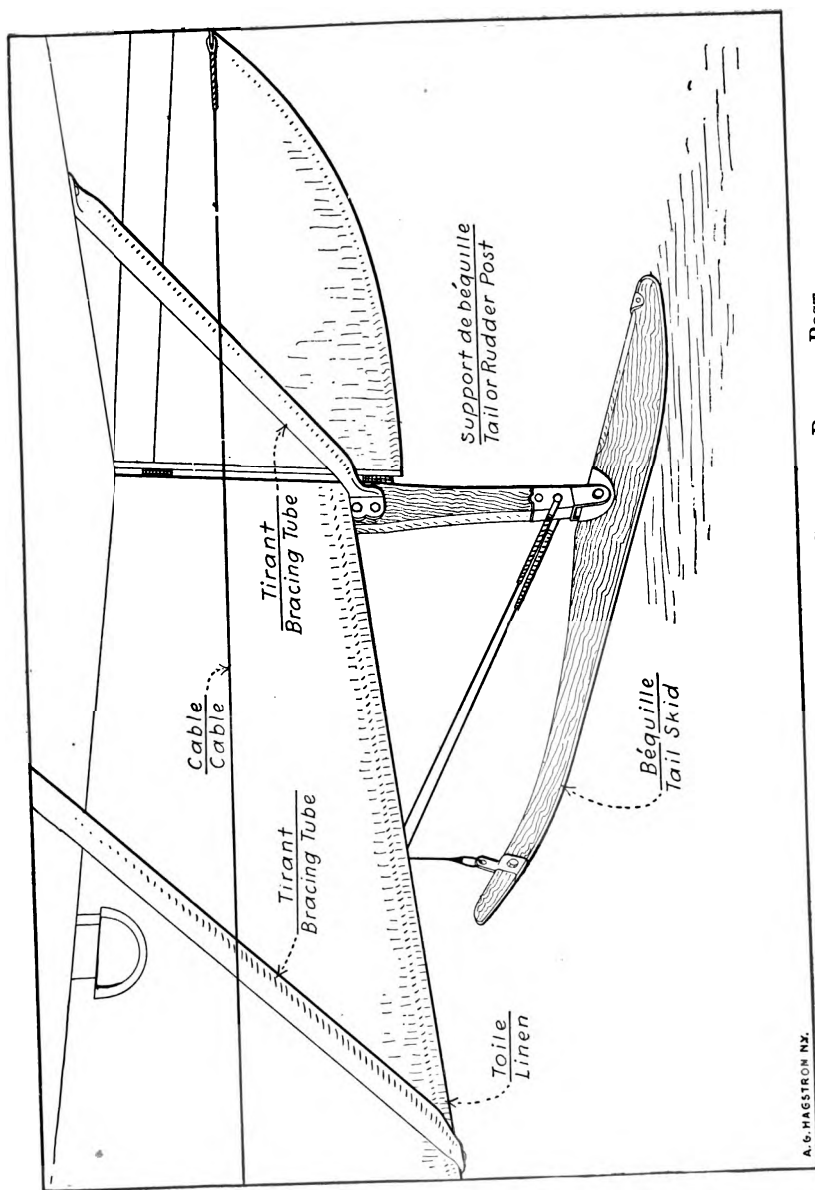


FIG. 12.—VIEW SHOWING TAIL SKID AND RUDDER POST
BÉQUILLE ET SUPPORT

A. G. HAGSTRON N.Y.

L'AVION

VERNIS
VOLANT DE DIREC-
TION

LE MOTEUR

ACCÉLÉRER
ACCUMULATEUR
ADMISSION
AIMANT
ALIMENTATION
ALLUMAGE
ANTIFRICTION
ARAIGNÉE DE
MOTEUR
ARBRE
ARBRE À CAMES
ARBRE SECONDAIRE
ARRIVÉE D'ESSENCE
ASPIRATION
AVANCE À L'ALLU-
MAGE
AXE
AXE D'UN LEVIER
(Point d'appui)

BATTERIE
BERCEAU DE MOTEUR
BIELLE

THE PLANE

VARNISH
STEERING WHEEL

THE ENGINE

TO ACCELERATE
STORAGE BATTERY
INLET
MAGNET
FEEDING
IGNITION
BABBITT METAL
ENGINE SUPPORT
SPIDER
SHAFT
CAMSHAFT
COUNTERSHAFT
FUEL PIPE
SUCTION
ADVANCE SPARKING

AXLE, AXIS
FULCRUM

CELL
ENGINE BED
CONNECTING ROD

LE MOTEUR

BOBINE
BOUCHON DE
VIDANGE
BOUCHON DE DES-
SABLAGE
BOUGIE
BOULON
BOYAU (Caoutchouc)
BUTÉE A BILLES

CABILLOT
CAME
CARBURATEUR
CARTER

CHAÎNE
CHAMBRE DE COM-
PRESSION
CHATERTUN
CHAUDIÈRE
CHEMINÉE D'ASPIRA-
TION
CHEMISE D'EAU
CHEVAL VAPEUR
(H.P.)
CLAPET
CLARINETTE ou
CONDUIT DE FILS
COGNER

THE ENGINE

COIL
DRAIN PLUG

CORE HOLE PLUG

SPARK PLUG
BOLT
HOSE
THRUST BEARING
(BALL)

TOGGLE
CAM
CARBURETOR
GEAR CASE, CRANK
CASE
CHAIN
COMBUSTION CHAM-
BER
TAPE
BOILER
MIXTURE PIPE

WATER JACKET
HORSE POWER

VALVE
WIRE CONDUIT

KNOCKING

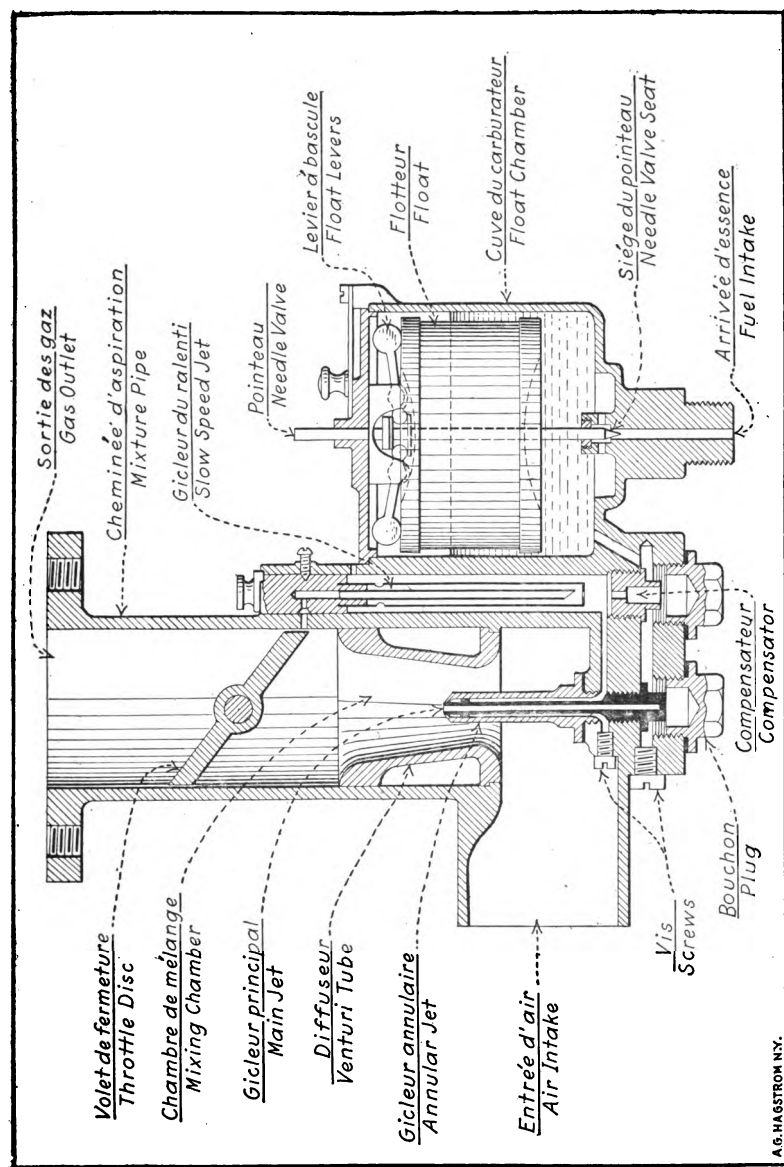


FIG. 13.—SECTIONAL VIEW OF ZENITH AIRPLANE ENGINE CARBURETOR
COUPE DU CARBURATEUR ZENITH POUR MOTEURS AVIONS

A.G. HASSTROM N.Y.

LE MOTEUR

COLLECTEUR
D'ÉCHAPPEMENT
COMPENSATEUR
COUDE DE VILBRE-
QUIN
COUSSINET
CULASSE
CULBUTEUR
CYLINDRE

DÉMULTIPLICATEUR
DIFFUSEUR
DISPOSITIF DE
RUPTURE
DISTRIBUTEUR
DURIT

ÉCHAPPEMENT
ÉCROU
EMBRAYAGE
ENGRENNAGE

FIL DE BOUGIE
FIL DE MASSE
FREIN
FLOTTEUR

GALET

THE ENGINE

EXHAUST MANIFOLD

COMPENSATOR
CRANK THROW

BEARING BOX
CYLINDER HEAD
ROCKER
CYLINDER

REDUCTION GEARING
VENTURI TUBE
CONTACT BREAKER

DISTRIBUTOR
INDIA-RUBBER PIPE,
GASOLINE HOSE

EXHAUST
NUT
CLUTCH
GEAR

SPARK PLUG WIRE
GROUND WIRE
BRAKE
FLOAT

CAM ROLLER

<u>LE MOTEUR</u>	<u>THE ENGINE</u>
GICLEUR	INJECTOR, SPRAY NOZZLE
GOUPILLE	SPLIT PIN
GOUTTIÈRE	OIL GROOVE
GRAISSEUR	GREASE or OIL CUP
GUIDE DE SOUPAPE	VALVE GUIDE
JOINT	PACKING
MAGNETO	MAGNETO
MANCHE À AIR	AIR FEEDER
MANIVELLE	CRANK
MANOMÈTRE	PRESSURE METER
MOLETTE	ADJUSTING NUT
MOTEUR	ENGINE
NIVEAU CONSTANT	FLOAT CHAMBER
PALIER	BASE BEARING
PANNE	MISHAP, BREAKDOWN
PARAFOUDRE	SAFETY GAP
PATTES D'ARAIGNÉES	OIL GROOVES (in bear- ing)
PIGNON	COG, PINION
PIGNON CONIQUE	BEVEL GEAR
PILE	BATTERY
PILE SÈCHE	DRY BATTERY
POINTEAU	NEEDLE VALVE
POMPE	PUMP

LE MOTEURPOMPE D'ALIMENTA-
TIONPRESSION
PRIMAIRERADIATEUR
RATÉS

REGULATEUR

RENIFLARD

RÉSERVOIR

RESSORT

RESSORT À BOUDIN

RESSORT À LAMES

RETARD À L'ÉCHAP-
PEMENTROBINET DE COM-
PRESSION

RODER

ROTATIF

ROULEMENT À BILLES
RUPTEUR

SEGMENT

SIÈGE DE SOUPAPE
SOIE DU VILBREQUIN

SOUPAPE

SOUPAPE D'ADMIS-
SION**THE ENGINE**

FEED-PUMP

PRESSURE
PRIMARYRADIATOR
MISSING

GOVERNOR

BREATHING PIPE
TANK

SPRING

COIL SPRING

LEAF SPRING

LATE EXHAUST

VALVE TIME or LAG
PETCOCK

(Compression Relief)

TO GRIND

ROTARY

BALL BEARING

CONTACT BREAKER

SEGMENT, PISTON
RING

VALVE SEAT

CRANK SHAFT JOUR-
NAL

VALVE

INLET VALVE

<u>LE MOTEUR</u>	<u>THE ENGINE</u>
SOUPAPE D'ÉCHAPPE- MENT	EXHAUST VALVE
TIGE DE SOUPAPE TREMBLEUR	VALVE STEM COIL VIBRATOR
TUYAU TUYAU D'ARRIVÉE TUYAU D'ÉCHAPPE- MENT	PIPE INLET PIPE EXHAUST PIPE
VILBREQUIN VIS VIS DE RÉGLAGE VIS PLATINÉE	CRANKSHAFT SCREW REGULATING SCREW PLATINUM TIPPED SCREW
VOLANT VOLET (Carburateur)	FLYWHEEL THROTTLE DISK
<u>OUTILLAGE ET TERMES D'ATELIER</u>	<u>TOOLS AND SHOP TERMS</u>
ACIDE ACIER ACIER FONDU ALCOOL ALÉSAGE ALLIAGE ALUMINIUM	ACID STEEL CAST STEEL ALCOHOL BORE ALLOY ALUMINUM

OUTILLAGE ET TERMES
D'ATELIER

AMIANTE
AMPÈRE
ANNEAU
ANTIFRICTION
APPROVISIONNER
ARMATURE
ATELIER

BAGUE
BAIN
BARBOTAGE
BARRE
BIDON
BISEAU
BOUCHON
BOULON
BRASER
BRIDE
BROCHE
BRONZE
BURETTE
BURIN

CALE D'ÉPAISSEUR
CAOUTCHOUC
CARDAN

CHALUMEAU
CHAMOIS (peau de)

TOOLS AND SHOP
TERMS

ASBESTOS
AMPERE
RING
BABBITT METAL
TO SUPPLY
ARMATURE
WORKSHOP

RING
BATH
SPLASHING
ROD
CAN
BEVEL
PLUG, CORK
BOLT
BRAZING
FLANGE
SPINDLE
BRONZE
OIL CAN
CAPE CHISEL

SPACING SHIMS
RUBBER
UNIVERSAL DRIVING
SHAFT
BLOW TORCH
CHAMOIS SKIN

OUTILLAGE ET TERMES
D'ATELIER

TOOLS AND SHOP
TERMS

CHARBON
 CHATERTUN
 CHEVILLE
 CISEAU À FROID
 CISEAUX
 CLAVETTE
 CLEF
 CLEF ANGLAISE }
 CLEF À MOLETTE }
 CLOU
 COMPAS
 CORNIÈRE
 COULISSE
 COURSE DU PISTON
 COURT-CIRCUIT
 COUVERCLE
 CRAMPONNER
 CRAN
 CRÉPINE
 CRIC

DEGRÉ
 DÉGRIPPER
 DÉMONTER
 DÉVISSER
 DOUILLE

ÉBONIT
 ÉCROU

COAL
 TAPE
 WEDGE
 CHISEL
 SCISSORS
 KEY
 SPANNER
 ADJUSTABLE
 WRENCH
 NAIL
 COMPASSES
 ANGLE IRON
 LINK MOTION
 PISTON STROKE
 SHORT CIRCUIT
 COVER
 TO CLAMP
 NOTCH
 STRAINER
 JACK

DEGREE
 TO FREE UP
 TO TAKE APART
 TO UNSCREW
 SOCKET

EBONITE
 NUT

OUTILLAGE ET TERMES**D'ATELIER**

EFFILER
EMAILLITE

EMBOUTIR
ENCLUME
ENTONNOIR
ESSENCE

ESTAMPER
ÉTAIN
ÉTANCHE
ÉTAU
ÉTINCELLE
ÉTOUPE

FAUSSER

FENTE
FER
FER BLANC
FERRURE
FIL

FIL DE FER
FIL DE CUIVRE
FIL ELECTRIQUE
FLAMBER (se tordre)
FONTE
FORET

TOOLS AND SHOP**TERMS**

TO TAPER
KIND OF DOPE FOR
THE PLANES
TO HOLLOW
ANVIL
FUNNEL
PETROL, SPIRIT,
GASOLINE
TO STAMP
TIN
TIGHT
VISE
SPARK
WASTE

TO SPRING, TO
DISTORT
CRACK
IRON
TIN PLATE
IRON MOUNTING
THREAD or FINE
WIRE
IRON WIRE
COPPER WIRE
ELECTRIC WIRE
TO BEND
CAST IRON
HAND DRILL

OUTILLAGE ET TERMES
D'ATELIER

FORGER
FONDRE
FOURRURE

FUITE

GALVANISÉ
GORGE
GOUPILLE
GOUPILLE CONIQUE
GOUPILLE
CYLINDRIQUE
GOUPILLE FENDUE
GRAISSE

GRAISSER

GRIPPER

HUILE
HUILE DE RICIN
HUILE MINÉRALE

ISOLANT

JAUGE
JOINT

TOOLS AND SHOP
TERMS

TO FORGE
TO CAST, TO MELT
REINFORCING
SLEEVE
LEAKAGE

GALVANIZED
GROOVE
PIN
TAPER PIN
STRAIGHT PIN

SPLIT PIN
GREASE, FAT,
LUBRICANT
TO GREASE, TO
LUBRICATE
TO SEIZE, TO STICK,
TO GRIP

OIL
CASTOR OIL
MINERAL OIL

INSULATOR

GAUGE
PACKING

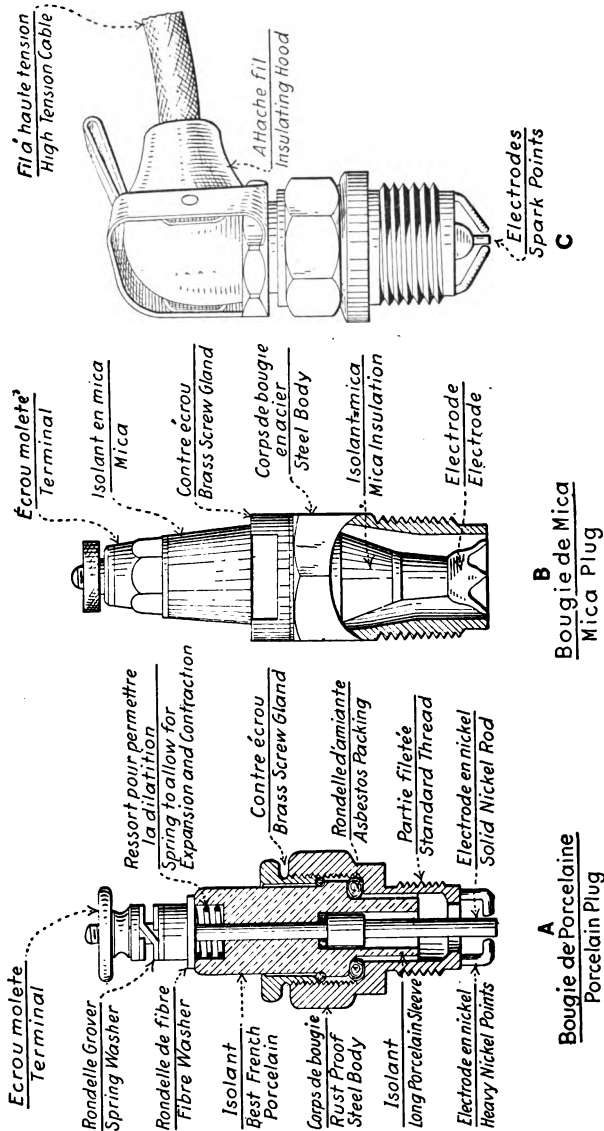


FIG. 14.—TYPICAL SPARK PLUG DESIGNS
 TYPES DE BOUGIES D'ALLUMAGE

OUTILLAGE ET TERMES
D'ATELIER

LAME
 LAMINÉ
 LAMPE À SOUDER
 LAQUE
 LAVER
 LEVIER
 LIER
 LIME

MAILLON
 MANCHE
 MANDRIN
 MARTEAU
 MASSE
 MÈCHE
 MICA

NICKEL
 NŒUD

ORIFICE
 OUTILS {
 OUTILLAGE }

PAPIER DE VERRE
 PARAFINE
 PEAU DE CHAMOIS
 PÉTROLE (LAMPANT)
 PERCER

TOOLS AND SHOP
TERMS

BLADE
 ROLLED
 BLOW TORCH
 SHELLAC
 TO WASH
 LEVER
 TO TIE
 FILE

LINK
 HANDLE
 MANDREL
 HAMMER
 SLEDGE HAMMER
 BIT
 MICA

NICKEL
 KNOT

OPENING
 TOOLS

SAND PAPER
 PARAFFIN
 CHAMOIS SKIN
 KEROSENE
 TO BORE, TO PIERCE

OUTILLAGE ET TERMES**D'ATELIER**

PIERRE À AFFUTER
PINCÉ (LEVIER)
PINCÉ PLATE
PINCÉ RONDE
PINCÉ COUPANTE
PLATINE
PLIER
PLOMB
POMPE
PONCE
POT DE FLEURS

RABOT
RACCORD
RACCORD GOUPILLÉ
ET BRASÉ
RAPE
REDRESSER

REFROIDIR
RENFORCER
RESSORT
RIVER
ROBINET
RODER
RONDELLE
RONDELLE GROVER

TOOLS AND SHOP**TERMS**

OIL STONE
CROW BAR
FLAT PLIERS
ROUND NOSE PLIERS
CUTTING PLIERS
PLATINUM
TO BEND
LEAD
PUMP
PUMICE STONE
SPECIAL STAND
FOR DISMOUNTING
ROTARY ENGINE

PLANE
JOINT
PINNED AND BRAZED
JOINT
RASP
TO STRAIGHTEN, TO
LINE UP
TO COOL
TO STRENGTHEN
SPRING
TO RIVET
COCK
TO GRIND
WASHER
SPLIT WASHER

OUTILLAGE ET TERMES**D'ATELIER**

ROUILLÉ
RUPTURE

SABLE

SAC

SAVON

SCIE

SERRER

SOUDURE

SOUDURE AUTOGENE

SOUDER A L'ÉTAIN

TAMIS

TIGE

TIREFONDS

TISSU METALLIQUE

TOILE ÉMERI

TÔLE

TÔLE EMBOUTIE

TÔLE D'ACIER

TORON

TOUR

TOURILLON

TOURNEVIS

TUBE

TUBULAIRE

TUYAU

TUYAUTERIE

TOOLS AND SHOP**TERMS**

RUSTY
BREAK

SAND

BAG

SOAP

SAW

TO FASTEN, TO SCREW

SOLDERING

AUTOGENOUS WELD-
ING

TO SOLDER

STRAINER

ROD, STEM

LAG SCREW

WIRE CLOTH

EMERY CLOTH

SHEET IRON

PRESSED STEEL

STEEL PLATE

STAND

LATHE

AXLE END

SCREW DRIVER

TUBE

TUBULAR

PIPE

PIPING

OUTILLAGE ET TERMES
D'ATELIER**TOOLS AND SHOP**
TERMS

VÉRIN
VERNIS
VIDANGE
VIS
VIS À OREILLE
VRILLE

USURE

ZINC

JACK SCREW
VARNISH
EMPTYING
SCREW
THUMB SCREW
GIMLET

USAGE

ZINC

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